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ABSTRACT

This report summarizes the most recent data available on key indicators of progress in U.S. higher education. The report examines trends in high school completion and college participation rates, educational attainment, college enrollment, and degrees conferred. The primary data sources include U.S. Census data and various surveys conducted by the U.S. Department of Education and other agencies. The report does not contain information on the high school and college participation rates of Asian Americans, American Indians, or Alaska Natives because the U.S. Census Bureau does not collect this information on an annual basis. The special focus section of this report examines the impact of racial and ethnic diversity within higher education and on business and society. Empirical evidence that supports the strongly held belief that diversity advances the mission of colleges and universities is mounting. This year's special focus is on the growing body of research that demonstrates the benefits of diversity and the importance of institutional context and climate. Co-authors of the special focus section are Kenji Hakuta and Jeffrey Milem. Overall, African Americans and Hispanic Americans aged 18 to 24 have improved their high school completion rates, although these continue to trail those of whites. College participation rates among all high school graduates continue to climb to a new high of 45.2% in 1997. These and other trends are discussed in these sections: (1) "High School Completion"; (2) "College Participation and Educational Attainment"; (3) "College Enrollment"; (4) "College Graduate Rates"; (5) "Degrees Conferred"; and (6) "Degrees Conferred by Field." (Contains 24 tables and 97 references.) (SLD)

Minorities in Higher Education

1999-2000

Seventeenth Annual Status Report

Deborah J. Wilds

American Council on Education

With generous support from:

GE Fund

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The Office of Minorities in Higher Education of the American Council on Education (ACE) is pleased to issue its *Seventeenth Annual Status Report on Minorities in Higher Education.* We wish to acknowledge the outstanding work of Jeffrey F. Milem, University of Maryland College Park, and Kenji Hakuta, Stanford University, co-authors of the special focus section, as well as Charles Dervarics, a contributor to the trends section of this report. Without the support of Linda Mabrey and Lachone Fuquay, this report would not have been produced. Special thanks also are extended to Mitchell Chang, University of California-Los Angeles; Brian Pusser, University of Virginia; Arnold Kee, American Association of Community Colleges; Jaci King, American Council on Education; and Janetta Hammock, American Council on Education, who served as reviewers for our special focus section. Our appreciation goes to Terri Huck, Wendy Bresler, and Kelly Stern for their editorial support. This report has been produced with the support of a grant from the GE Fund.

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Foreword

The American Council on Education, in cooperation with and with support from the GE Fund, is pleased to present this *Seventeenth Annual Status Report on Minorities in Higher Education,* which reveals higher education's progress in ensuring access and opportunity for all Americans. We are particularly proud of our cooperative partnership in this effort; it reflects our mutual dedication to providing young people–regardless of race, gender, or socioeconomic status–with the tools they need to succeed in today's highly complex society.

The good news is that this year's report shows further increases in the college participation and degree attainment rates of African-American and Hispanic students. Still, participation rates for these students continue to lag behind those of their white counterparts. Although college enrollment among all students of color has risen, students of color remain underrepresented at every academic degree level.

The GE Fund, through its Pre-College and Higher Education grants programs, has invested heavily in narrowing these gaps. The Fund's College Bound program, with nearly $20 million in grants and thousands of GE employee and retiree volunteer hours over the past ten years, was shown in a recent independent evaluation to have significantly increased college-going rates at high schools across the country, particularly among underrepresented students. The Faculty for the Future program, another $20 million-plus investment to date, accounts for more than 170 of the women and minority faculty in business, engineering, and sciences, with hundreds more in the pipeline.

The GE Fund's commitment to this ACE initiative comes from an understanding that all of us benefit from a stronger, more diverse citizenry and workforce. Access to high-quality higher education for all of the nation's citizens must be a priority.

The 1999-2000 *Status Report* shows us how far we have come and challenges us to move forward boldly.

Stanley O. Ikenberry
President
American Council on Education

Joyce Hergenhan
President
GE Fund

American Council on Education

GE Fund

Introduction

This *Seventeenth Annual Status Report on Minorities in Higher Education,* released by the Office of Minorities in Higher Education of the American Council on Education (ACE), summarizes the most recent data available on key indicators of progress in American higher education. The report examines trends in high school completion and college participation rates, educational attainment, college enrollment, and degrees conferred. As with previous editions of this report, the primary data resources include the U.S. Bureau of the Census Current Population Reports and the Higher Education General Information and Integrated Postsecondary Education Data System survey reports of the U.S. Department of Education's National Center for Education Statistics. For the several faculty data tables, the report relies primarily on surveys produced by the U.S. Equal Employment Opportunity Commission and the U.S. Department of Education.

The report does not contain information on the high school completion and college participation rates of Asian Americans, American Indians, or Alaska Natives because the U.S. Census Bureau does not collect this information on an annual basis. We continue to emphasize the need for such data.

The special focus section of this report examines the impact of racial and ethnic diversity within higher education, as well as on business and society. Empirical evidence that supports the strongly held belief that diversity advances the mission of colleges and universities is mounting. This year's special focus discusses the growing body of research that demonstrates that racial and ethnic diversity benefits individuals, colleges and universities, the economy, and society. This section also emphasizes the importance of institutional context and climate in optimizing the benefits of racial and ethnic diversity in higher education. The co-authors of the special focus section are Kenji Hakuta, Professor, School of Education, Stanford University, and Jeffrey Milem, Assistant Professor, College of Education, University of Maryland College Park.

Executive Summary

HIGH SCHOOL COMPLETION

• Overall, during the most recent 20 years for which data are available, African Americans and Hispanics ages 18 to 24 have improved their high school completion (HSC) rates. Nevertheless, their completion rates–particularly those of Hispanics–continue to trail that of whites.

• The gap between high school completion rates for whites and African Americans was 8 percentage points in 1997, the largest since 1992. Recent declines in completion rates for African Americans accounted for this disparity. The gap between whites' and Hispanics' high school completion rates remains wide: more than 20 percentage points in 1997.

• In 1997, the high school completion rate for African Americans ages 18 to 24 declined for the third consecutive year, to 74.7 percent. This reflects a decrease of more than 2 percentage points since 1990, when their HSC rate was 77 percent.

• Hispanics' high school completion rate increased from 57.5 percent in 1996 to 62 percent in 1997. Although the 1997 figure reflects an increase since 1990, it is similar to those posted in the mid-1980s, when completion rates exceeded 60 percent.

• The high school completion rate for Hispanic women increased more than 5 percentage points in 1997, to 65.7 percent, the highest rate since 1985. Overall, Hispanic women have posted increases of 10 percentage points since 1990.

• For more than two decades, women in all three major racial and ethnic minority groups have outstripped men in their high school completion rates. The gender gap in high school completion rates continues to be wider among African Americans and Hispanics than among whites. In 1997, the gender gap was more than 6 percentage points for African Americans and Hispanics, compared with 4 percentage points for whites.

COLLEGE PARTICIPATION AND EDUCATIONAL ATTAINMENT

• After decreasing during the 1980s, the number of college-age youths has hovered around 25 million since 1990. Between 1996 and 1997, the number of whites increased slightly, while the numbers of African Americans and Hispanics remained roughly constant. During the 1990s, the number of youths in the African-American college-age population increased 3.7 percent, compared to a 31 percent increase in the Hispanic college-age population.

• College participation rates among all high school graduates ages 18 to 24 continue to climb and reached a new high of 45.2 percent in 1997. This rate was up nearly 2 percentage points from its previous high mark in 1996.

• In 1997, the college participation rate for African Americans increased by nearly 4 percentage points, to 39.8 percent, while that for Hispanics was up 1 percentage point, to 36 percent. Despite this upward trend, African Americans and Hispanics continue to trail whites in terms of college participation rates for high school graduates ages 18 to 24. In 1997, whites recorded their highest college participation rate ever: 45.3 percent.

• White, African-American, and Hispanic female high school graduates ages 18 to 24 are more likely than their male counterparts to participate in higher education. Because of gains by women, the gender gap among African Americans grew from 1 percentage point in 1996 to 8 percentage points in

1997. Hispanics also had a gender gap of approximately 7 percentage points for the year.

• Overall, 27.8 percent of young adults ages 25 to 29 held a bachelor's or higher degree in 1997. During the previous three years, the percentage of persons in this age group holding a bachelor's degree increased nearly 5 percentage points.

• A higher percentage of African Americans ages 25 to 29 held a bachelor's degree in 1997 than did ten years previously. However, the African-American educational attainment rate of 14.4 percent in 1997 was half the 28.9 percent rate for whites.

• Only 11 percent of Hispanics ages 25 to 29 had a bachelor's degree in 1997. However, this rate reflects an increase of 2 percentage points since 1995.

• Both Hispanic and African-American men experienced little change in 1997 in the number of 25- to 29-year-olds with a baccalaureate degree. The rate for Hispanic women increased slightly, while that for African-American women was unchanged from 1996.

COLLEGE ENROLLMENT

• Overall, college enrollment remained largely unchanged from 1996 to 1997, continuing a trend that began in 1991. The main factor in this stagnation is a continuing enrollment decrease among whites, whose college-age population declined during the 1980s and early 1990s. Since 1993, the college enrollment rate for whites has decreased by 3.1 percent.

• In contrast, since the late 1980s, students of color have increased their total college enrollment by 57.2 percent, which includes a 16.1 percent gain during the most recent five years for which data are available. Enrollment among students of color increased 3.7 percent from 1996 to 1997.

• All four major ethnic minority groups increased their college enrollments in 1997. African Americans had the smallest growth rate (3 percent), while Hispanics had the largest (4.5 percent). Hispanics recorded the largest gains at two-year institutions, while American Indians had the greatest percentage increase at four-year institutions. Hispanics also had the largest increase at independent colleges and universities, while Hispanics and American Indians shared the largest percentage gain at public institutions.

• Enrollment among students of color increased in 1997 in each of the three major degree levels of higher education. The largest gain–8.9 percent–occurred at the professional school level, although students of color posted increases of 5.6 percent and 3.5 percent at the graduate and undergraduate levels, respectively.

• With a considerable enrollment increase of 10.1 percent at professional schools from 1996 to 1997, African Americans reversed an enrollment decline that began in the mid-1990s.

• Despite a 2.9 percent increase in 1997, African Americans had the smallest rate of undergraduate enrollment growth among the four major ethnic groups since 1993.

• Reflecting their growth in the U.S. population, the number of Hispanics enrolled in higher education increased 79.2 percent from 1988 to 1997. This is the highest enrollment growth rate among the four major ethnic groups.

• Hispanics' enrollment increases of 8.1 percent at the graduate level and 4.3 percent at the undergraduate level from 1996 to 1997 were the largest among the four ethnic minority groups.

• For the fourth consecutive year, Asian-American women in 1997 had greater representation in higher education than Asian-American men. Since 1993, Asian-American women have achieved a 22.2 percent enrollment increase, compared to a 15 percent increase by Asian-American men.

• In 1997, for the first time, slightly more American Indians were enrolled at four-year colleges and universities than at two-year institutions. Enrollment at four-year institutions increased by 6.2 percent from 1996 to 1997, compared with a 1 percent increase at two-year institutions.

• Although their actual numbers remain small, American Indians had the largest one-year increase at the professional school level among the four major ethnic groups. From 1996 to 1997, American Indian enrollment at professional schools increased 13.1 percent.

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COLLEGE GRADUATION RATES

• Among all ethnic groups, Asian Americans had the highest graduation rate–65 percent–at Division I institutions in 1997. White students followed next, with a graduation rate of 58 percent, while Hispanics, African Americans, and American Indians trailed these two groups.

• The graduation rate of African Americans at Division I institutions increased from 38 percent to 40 percent in 1997. Since 1992, African Americans have posted the largest increase among the four ethnic groups: 6 percentage points.

• The graduation rate of Hispanics remained unchanged at Division I institutions in 1997, at 45 percent. Hispanics have made little progress since 1992, and they continue to trail both whites and Asian Americans.

• Again in 1997, with a college completion rate of 36 percent, American Indians had the lowest graduation rate at Division I colleges and universities among the four major ethnic groups.

DEGREES CONFERRED

• Since the late 1980s, students of color have earned increasing numbers of degrees. Since 1987, minority students have outpaced white students in their rate of increase at all degree levels.

• The proportion of bachelor's degrees awarded to students of color increased from 12.1 percent in 1987 to 19.8 percent in 1997, while the percentage of first-professional degrees awarded increased from 11.2 percent to 21 percent during the same period. Nevertheless, compared with their enrollments, students of color remain underrepresented at every degree level.

• Women of color earned more associate, bachelor's, and master's degrees than men of color and also outgained them in their rate of increase from 1996 to 1997. The largest gains by women of color were 9.5 percent at the master's degree level and 9 percent at the associate degree level.

• African Americans experienced small to moderate increases in all degree categories in 1997, ranging from a 3.2 percent increase at the bachelor's degree level to a 10.2 percent increase at the master's degree level. African-American women posted larger one-year increases than African-American men in all four degree categories in 1997.

• After decreasing in the early to mid-1980s, the number of African

Americans earning bachelor's degrees increased 66.3 percent from 1987 to 1997.

• During the most recent ten years for which data are available, the number of Hispanics earning bachelor's degrees has more than doubled.

• Hispanics recorded gains in all degree categories in 1997, ranging from 2.2 percent more first-professional degrees to 11.7 percent more associate degrees. Hispanic women achieved larger gains than Hispanic men at the associate, bachelor's, and master's levels from 1996 to 1997.

• From 1987 to 1997, the number of Asian Americans who received bachelor's degrees more than doubled.

• Asian Americans achieved increases in all degree categories from 1996 to 1997, ranging from 1.7 percent more master's degrees to 7.5 percent more associate degrees. At the bachelor's and first-professional levels, Asian Americans recorded increases of 5.6 percent and 6.3 percent, respectively.

• Even though American Indians earned only a tiny fraction of the first-professional degrees awarded nationwide (511 degrees), they experienced the largest gain (10.4 percent) of all racial and ethnic groups at this level from 1996 to 1997.

• In 1997, American Indians earned 6.7 percent more associate degrees, 6.3 percent more bachelor's degrees, and 8.2 percent more master's degrees than in 1996. These gains resulted from uneven progress by American Indian women and men at the various degree levels.

DEGREES CONFERRED BY FIELD

• From 1996 to 1997, students of color made progress in all six major fields of study at the bachelor's degree level and made mixed progress at the master's degree level. For baccalaureates, the largest percentage gain–7.8 percent–occurred in life sciences, followed by health professions, with a 7.7 percent increase. Students of color also realized moderate gains in the number of bachelor's degrees earned in social sciences and education.

• At the master's degree level, students of color experienced the largest increase–9.8 percent–in education. But students of color lost ground in engineering, where the number of degrees they earned decreased 8.4 percent. The number of degrees earned in the health professions was unchanged.

• Despite increases in other categories, African Americans earned 0.9 percent fewer bachelor's degrees in business–the field that traditionally confers the largest number of degrees on African Americans.

• African-American women in 1997 achieved more significant gains than African-American men in most fields at the bachelor's and master's degree levels. Exceptions were bachelor's engineering degrees and master's social science and health professional degrees, where African-American men posted larger increases than African-American women.

• Hispanics achieved gains in five of the six major fields at both the bachelor's and master's degree levels in 1997. The largest increases were 9.6 percent in education and 8.5 percent in life sciences at the bachelor's level. With small declines of 2 percent in the number of bachelor's degrees earned and 0.9 percent in the number of master's degrees earned, Hispanics lost ground in the number of engineering degrees earned.

• At the bachelor's degree level, the most popular fields among Asian Americans in 1997 were business, life sciences, and engineering.

• In 1997, Asian Americans achieved the largest percentage increase (12.7 percent) in the number of bachelor's degrees earned in health professions. Asian-American men and women contributed to this upward trend, with increases of 16 percent and 11.6 percent, respectively.

• Similar to other ethnic minority groups, American Indians' three most popular fields of study at the bachelor's degree level in 1997 were business, education, and social sciences.

• American Indians in 1997 registered increases in all major fields at the bachelor's degree level, led by an increase of 8.1 percent in the number of social sciences degrees, 6.8 percent in the number of life sciences degrees, and 6.3 percent in the number of health profession degrees.

DOCTORAL DEGREES

• The number of doctoral degrees earned by students of color who are U.S. citizens increased 8.4 percent from 1996 to 1997, following a period of moderate growth from the late 1980s until the mid-1990s. Overall,

students of color earned 88 percent more doctoral degrees in 1997 than in 1987.

• The number of African Americans earning doctoral degrees increased 1.5 percent in 1997, the second consecutive small increase following a large gain in 1995. However, African-American men registered a decrease in the number of doctoral degrees earned for the first time in three years.

• Hispanics recorded an 8.2 percent increase in the number of doctorates earned in 1997, when the number surpassed 1,000 for the first time. Hispanics have achieved progress of 66.6 percent in the number of doctoral degrees earned during the past decade.

• After an unexpected one-year decline in 1996, the number of Asian Americans earning doctoral degrees increased 21.8 percent in 1997, the largest increase among the four major ethnic minority groups.

• American Indians earned 19.9 percent fewer doctoral degrees in 1997, with men accounting for most of the decline. Only 149 American Indians earned doctoral degrees in 1997, less than half of 1 percent of all doctoral degrees awarded that year.

SPECIAL FOCUS

The Benefits of Racial and Ethnic Diversity in Higher Education

College and university administrators, academics, and national education associations firmly believe that racial and ethnic diversity expands and enriches teaching and learning. Legal challenges to affirmative action and increased public scrutiny regarding the use of race in college admissions require that higher education expand the body of empirical evidence that examines and documents the benefits of diversity.

There are primarily three types of diversity that have an impact on student outcomes: structural diversity, diversity-related initiatives, and diverse interactions.

• *Structural diversity* is the numerical and proportional representation of students from different racial/ethnic groups in the student body.

• *Diversity-related initiatives* include cultural awareness workshops, ethnic studies courses, etc., that occur on campus.

• *Diverse interactions* are the various exchanges that students have with diverse people and diverse ideas, information, and experiences.

Although each type of diversity can confer significant positive effects on educational outcomes, the three types are not mutually exclusive. For example, we are most frequently exposed to diverse information and ideas through interactions with diverse people; the impact of diversity-related initiatives on students is much greater on campuses characterized by structural diversity.

Data indicate that diverse campuses positively impact: (1) individual students, (2) higher education institutions, (3) the economy and private enterprise, and (4) society.

Benefits of Diversity to Individual Students

Research findings on diversity and individual outcomes indicate that students who participated in racial and cultural awareness workshops or who interacted with diverse peers:

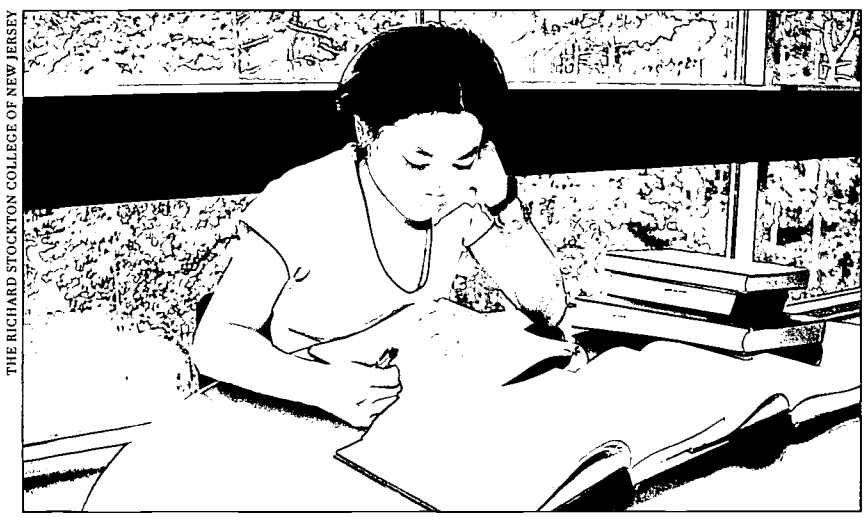
• showed measurable gains in their critical thinking skills;

• reported greater openness to diversity and challenge;

• exhibited reduced levels of ethnocentrism; and

• made appropriate distinctions between poverty and ethnicity as developmental risk factors.

Students who reported higher levels of contact with diverse ideas and information and diverse people



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were more likely to show growth in their "active thinking processes," which were represented by increases in measures of complex thinking and social/historical thinking. In addition, students who had greater exposure to diversity were more likely to show higher levels of intellectual engagement and motivation and to report higher postgraduate degree aspirations.

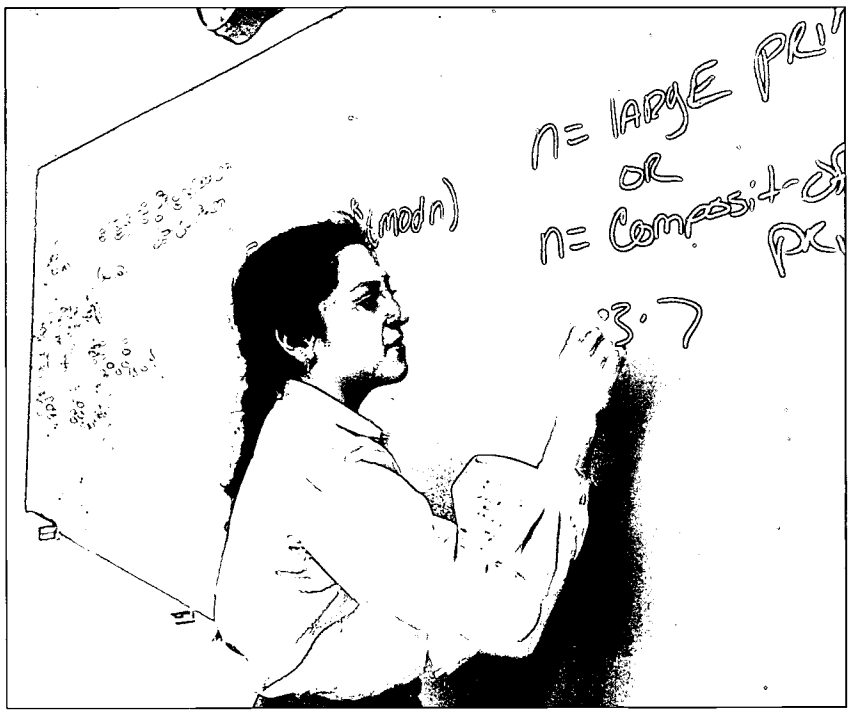
Exposure to various types of diversity had different relative impact on students according to their racial/ethnic background. While white students were more likely to benefit from exposure to diverse ideas and information and exposure to diverse peers, African-American students were most likely to benefit from interactions with diverse peers. Moreover, African-American students experienced positive learning outcomes when they had close friends of their own race.

Research also shows that greater interaction with diverse people and ideas decreased the disparity in perceptions of campus climate frequently found between students of color and white students. This suggests that greater interaction with diversity in college helps students better understand and appreciate the perspectives of groups other than their own.

A study of law students reiterated these findings: An overwhelming majority of the students surveyed believe that their interactions with diverse people and ideas while in law school enhanced their own learning and thinking in fundamental ways. Ninety percent of the students in the study believed that exposure to racial and ethnic diversity at their law school had a positive impact on their educational experience.

A recent study revealed that more than 90 percent of faculty participants (95.4 percent of women compared to 87.7 percent of men) in a national survey believe that a racially/ethnically diverse student body enhances the educational experience of all students. This suggests that faculty members–those primarily responsible for what occurs in the classroom–believe that racial and ethnic diversity is important to higher education institutions' teaching and learning missions.

Diversity also influences students' material outcomes. For example, both black and white men who attended selective colleges with more diverse student bodies had increased earnings. African-American men who attended selective institutions had an average annual income twice that of African-American college graduates nationally. Moreover, African-American students who attended selective institutions were five times as likely as all African-American students nationwide to earn advanced degrees.



MILLS COLLEGE/PHOTO: ARIEL THOMAS

Impact of Diversity on Higher Education Institutions and Their Missions

Increased racial and ethnic diversity has a transformative effect on colleges and universities. This is evidenced by the ways in which scholarship in ethnic and women's studies has changed the nature of what is studied, how it is studied, and how excellence is defined in particular disciplines.

Several studies show that women and faculty of color are more likely than white men to engage in activities that enrich the three primary missions of the university (teaching, research, and service).

• Research indicates that having a diverse faculty provides students with a greater opportunity to encounter readings and research that address the experiences of women and members of different racial/ethnic groups.

• Faculty of color and women faculty expand the boundaries of current knowledge through the research they produce. They are much more likely than white male faculty to engage in research that extends knowledge of issues pertaining to race/ethnicity and women/gender in society. Faculty of color and women faculty engage in service-related activities more frequently than their white male colleagues.

Institutional leaders who wish to utilize diversity to successfully transform their institutions in ways that make them more democratic and equitable and that enhance teaching and learning for all students must pay close attention to their campuses' climates for racial and ethnic diversity.

Benefits of Diversity to the Economy and the Private Sector

The movement toward globalism has affected the human resource needs of corporations that want to remain competitive in a global economy. Four types of human resource needs must be met if companies are to compete in rapidly expanding global markets. Workers must possess:

• Domain knowledge, which refers to knowledge in specific subject matter areas;

• Cognitive, social, and personal skills:

Cognitive skills, including decision making, problem solving, and learning how to learn;

Social skills, including the ability to function effectively in work groups with others of diverse backgrounds; and

Personal skills, including flexibility and adaptability, openness to new ideas and approaches, empathy regarding others' perspectives, commitment to high-quality work, and innovation;

• Prior experience and on-the-job training, which pertains to opportunities for students to apply their domain knowledge and personal skills in work settings while in college; and

• Crosscultural competence, identified as the most critical human resource need because it "crosses over" the other categories. It involves some domain knowledge (in relation to other cultures), as well as social skills and personal traits that enhance cross-cultural communication and cooperation. This skill enables workers to function effectively in an increasingly diverse marketplace.

Business leaders assert that many students are not sufficiently exposed to other cultures to learn how to work effectively with individuals who are different from themselves. They suggest that diverse colleges and universities provide an environment for learning that can help provide students with the critical skills required in an economy–both domestic and global–that needs cross-culturally competent workers.

Research suggests that diversity in the workplace is good for business because it increases the flexibility and economic viability of companies in ways that enable them to maximize their earnings. Properly managing diversity in the workplace leads to lower employee turnover, greater work team productivity, and increased creativity and innovation. Data also show that organizations that capitalize on their diversity enjoy a competitive cost advantage.

The most innovative companies deliberately establish heterogeneous work teams, which have been found to be more creative than more homogeneous groups. Further research indicates that diverse groups are more likely to do a better job of problem solving than more homogeneous groups. Studies show that work teams with minority members are more likely than homogeneous groups to generate higher levels of critical analysis in problem solving.

However, increased diversity can lead to lower levels of cohesiveness. While cohesiveness has been shown to enhance morale and communication, there is no evidence that it enhances work performance. Diverse organizations also tend to communicate less effectively. As a result, members' anxieties may rise, conflict may increase, and members may feel less comfortable in the group. Therefore, organizations must be purposeful and deliberate in their movement to diversify.

Research indicates that affirmative action programs have increased the representation of minority men and women in the workforce and have led to decreased job discrimination, decreased wage disparities, decreased occupational segregation, increased occupational aspirations for women and people

of color, and greater organizational productivity.

Societal Benefits

Higher education meets the democratic, civic, and social needs of society by preparing students to function effectively as citizens of an increasingly diverse society and to address the basic needs of its most underserved members.

Campus diversity influences how college graduates function as citizens. The extent to which students interact cross-racially influences their acceptance of people from other cultures, their participation in community service programs, their growth in other areas of civic responsibility, and their levels of cultural awareness and acceptance, as well as their commitment to the goal of improving racial understanding.

Research also reveals that school desegregation helps diminish racial stereotypes, lessen white adults' fears of hostile reactions in interracial settings, promote more racially and ethnically integrated work environments, increase the likelihood that students will enroll in an integrated college or university, and increase African Americans' college persistence rates.

Despite the benefits that are gleaned from school desegregation, segregation at the high school level is actually increasing. Thus, college may be the first (and only) place where many students encounter and interact with persons of a different race or ethnicity.

In recent years, institutions have become increasingly convinced of the need to diversify their student bodies. They have come to understand their obligation to educate graduates who can work effectively in increasingly diverse environments and to develop an expanded pool of people of color and women who could assume leadership roles in their communities.

As our society has become increasingly diverse, the need for leaders who represent diverse communities has increased dramatically. Studies of student involvement in community and civic service suggest that students of color who graduate from selective institutions are much more likely than their white peers to "give back" to society.

African-American students who attend selective institutions are likely to be extensively involved in civic and community activities; they are more likely than white students to hold positions of leadership in multiple civic and community organizations. Extensive research establishes the societal value of racial and ethnic minority participation in the medical profession. Studies show that physicians of color are significantly more likely than their white counterparts to pursue medical specialties that address the needs of medically underserved people and to locate their practices in areas convenient to those populations. For example, nearly one-third more minority than white doctors choose primary care specialties. Moreover, physicians of color are twice as likely as white physicians to practice in areas designated as health-manpower shortage areas. They also are more likely than white physicians to have Medicaid recipients as patients.

The Role and Responsibility of Individual Campuses Regarding Diversity in Higher Education

Individual campuses have a responsibility to provide evidence that documents diversity as a principal component of their educational mission. It is important for colleges and universities to provide evidence that documents: (1) the educational need for diversity, (2) the educational outcomes of diversity, and (3) the ways in which institutions use their diversity to enhance teaching and learning.

An institution should provide clear answers to questions such as the following:

- How does the institution define diversity?
- How do the institution's core educational goals relate to its diversity objectives?
- What are the educational benefits of diversity to the institution?
- What evidence that these outcomes are being realized can the institution provide?
- What evidence can the institution provide that demonstrates that it has enacted clear and consistent educational policies and practices that help ensure that the benefits of diversity are realized?

By answering these questions, colleges and universities will be able to document the ways in which a diverse student body enhances the mission of the school and/or program in which it exists. □

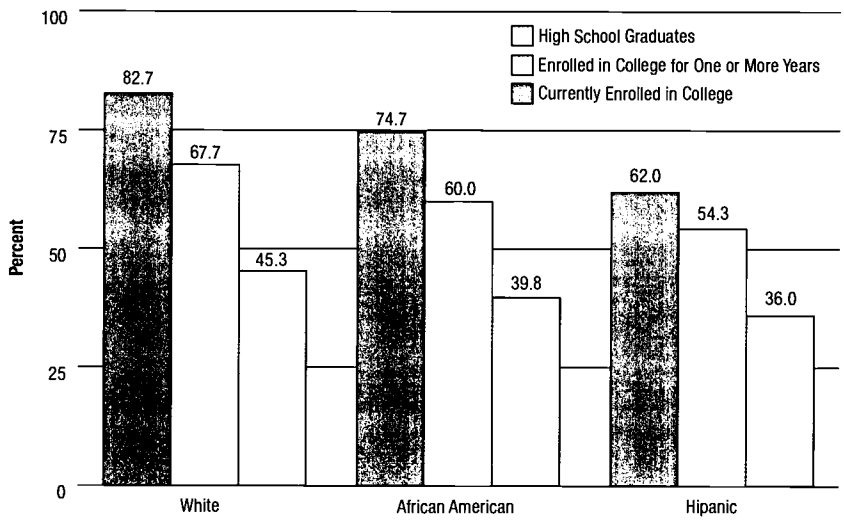
High School Completion

This section examines the most recent high school completion (HSC) rates for white, African-American, and Hispanic 18- to 24-year-olds nationwide, based on the U.S. Census Bureau's 1997 Current Population Survey (CPS). These data include students who earned either a high school diploma or an equivalency such as the General Educational Development (GED) certificate. The U.S. Census Bureau does not report year-to-year HSC rates for Asian Americans or American Indians ages 18 to 24 because the survey sample is too small to provide reliable estimates. The figures cited in this report are national aggregates. It also should be noted that high school completion rates are lower for some groups in many urban and rural areas.

The 1997 CPS data show that African Americans and Hispanics ages 18 to 24 continue to trail whites in terms of high school completion (Figure 1). However, over the past 20 years, African Americans achieved a gain of more than 7 percentage points, thereby reducing the black/white gap during that period (Table 1). As noted in previous reports, gains made before 1990 account for all of the increases by African Americans. The 1997 African-American HSC rate of 74.7 percent is slightly less than the 1996 rate and more than 2 percentage points less than the 1990 rate.

Figure 1

High School Completion and College Participation Rates for 18- to 24-Year-Olds, by Race and Ethnicity: 1997



Source: U.S. Department of Commerce, Bureau of the Census. *School Enrollment—Social and Economic Characteristics of Students: October 1997.* Current Population Reports, P-20 Series, 1998.

Although high school completion rates for Hispanics have varied greatly during the past 20 years, the rate remains significantly less than those for whites and African Americans. In 1997, the Hispanic HSC rate trailed those for whites and African Americans by 20 and 12 percentage points, respectively.

Overall, Hispanics ages 18 to 24 improved their high school completion rate by more than 7 percentage points during the past two decades (Table 1). While year-to-year fluctuations in Hispanic HSC rates are common because of the small sample size, their 62 percent completion rate in 1997 represents an increase of 4.5 percentage points from the previous year.

The high school completion rate for whites ages 18 to 24 increased slightly in 1997, to 82.7

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percent. This increase, combined with a slight one-year decline in completion by African Americans, resulted in the largest gap in HSC rates between the two groups since 1993. In 1997, the gap in high school completion rates between white and African-American 18- to 24-year-olds was 8 percentage points.

In 1997, women in all three groups posted higher HSC rates than men. Women's high school completion rates have outstripped those of men for more than two decades (Table 2). The gender gap in high school completion continues to be more pronounced among African Americans and Hispanics than among whites. The gender gap in 1997 was more than 6 percentage points for both African Americans and Hispanics, compared with 4 percentage points for whites.

African Americans

• The 1997 CPS data show that 74.7 percent of African Americans ages 18 to 24 completed high school, representing a slight decline from the previous year and a 2 percentage point decline from 1990, when their HSC rate was 77 percent (Table 1).

• The HSC rate for African-American men held steady from 1996 to 1997 (Table 2). However, the 1997 rate of 71.4 percent reflects a decrease of nearly 4 percentage points from the 20-year high of 75.9 percent that was recorded in 1990.

• The completion rate for African-American women declined 1 percentage point, to 77.5 percent, in 1997–a rate similar to that posted in 1990 but below those posted during the mid-1980s (Table 2).

• The gender gap in HSC rates narrowed slightly in 1997, primarily as a result of the decrease in completion by African-American women. The gap of 6 percentage points in 1997 is similar to that recorded in 1977.

Hispanics

• HSC rates for Hispanics have fluctuated greatly during the past 20 years. Although their completion rates remain far behind those of African Americans and whites, Hispanics posted a moderate increase in 1997, when their completion rate was 62 percent–an increase of 4.5 percentage points from the previous year (Table 1). The 1997 HSC rate for Hispanics reflects an increase of nearly 8 percentage points since 1990, though it is similar to the HSC rates attained in the mid-1980s, which hovered around 60 percent before decreasing in the late 1980s.

• Although the 1997 HSC rate of 58.9 percent was up more than 4 percentage points from 1996, long-term trends indicate that HSC rates for Hispanic men continue to fluctuate (Table 2). Overall, Hispanic men have made progress since 1990.

• The high school completion rate for Hispanic women increased by 5 percentage points, to 65.7 percent, in 1997–their highest completion rate since 1985 (Table 2). Overall, Hispanic women have achieved a gain of more than 10 percentage points since 1990.

• Increases in both men's and women's HSC rates mean that the gender gap in 1997 held relatively steady at more than 6 percentage points (a slight increase from the previous year). ■

College Participation and Educational Attainment

College participation rates are important indicators of educational progress by different racial and ethnic groups. Unlike enrollment figures, which examine college attendance during a specific period of time, participation rates track both current enrollment and recent college attendance patterns of given age groups. College participation data in this report are for the 18- to 24-year-old and 14- to 24-year-old populations.

Three types of college participation rates are available through U.S. Census Bureau data: the percentage of all 18- to 24-year-olds enrolled in college; the percentage of high school graduates ages 18 to 24 enrolled in college; and the percentage of high school graduates ages 14 to 24 who enrolled in college and/or have completed at least one year of postsecondary education. As in prior reports, this third category is referred to as the "ever-enrolled-in-college" rate.

This section focuses primarily on the percentage of 18- to 24-year-old high school graduates enrolled in college and includes some discussion of the "ever-enrolled" rate. This report provides a general profile of the college-going rates of Hispanics, African Americans, and whites. As with high school completion rates, reliable national Census data are not available for American Indians and Asian Americans.

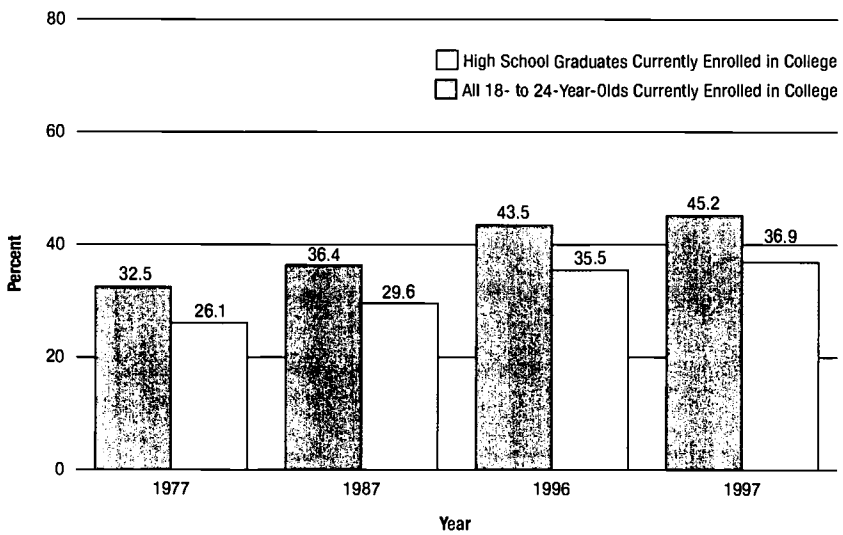
After decreasing during the 1980s, the number of college-age youths remained relatively constant, at approximately 25 million, during the 1990s (Table 1). The earlier decreases were caused by a decrease in the number of white 18- to 24-year-olds. Since 1990, the number of white college-age youths has fluctuated slightly, hovering around 20 million.

The number of African American college-age youths increased by nearly 8 percent between 1977 and 1997 and by 3.7 percent since 1990. In contrast, the Hispanic college-age population more than doubled during the past 20 years, including an increase of 31 percent since 1990.

As a greater percentage of young adults enrolled in college,

Figure 2

College Participation Rates of 18- to 24-Year-Olds, by High School Completion Status: 1977, 1987, 1996, and 1997



Source: U.S. Department of Commerce, Bureau of the Census. *School Enrollment—Social and Economic Characteristics of Students: October 1997.* Current Population Reports, P-20 Series, 1998.

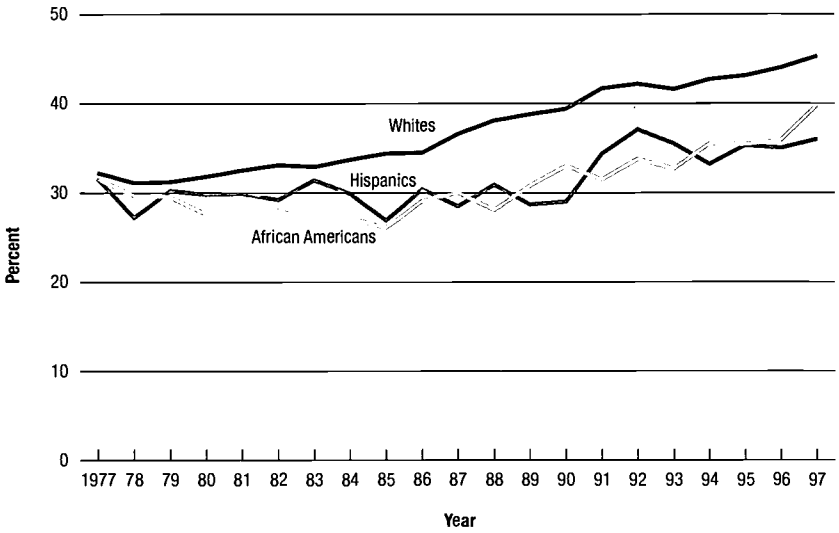
college participation rates among all high school graduates ages 18 to 24 increased in 1997, reaching another new high: The 1997 rate of 45.2 percent is an increase of nearly 2 percentage points over that of the previous year (Figure 2). Overall, the college-going rate of high school graduates in this age group has increased by more than 6 percentage points since 1990 and by nearly 13 percentage points during the past two decades.

College participation rates are up for all racial and ethnic groups, with white youths making the largest gain. Since 1977, the college participation rate for whites has increased by more than 13 percentage points (Figure 3). African Americans experienced a decline in their college-going rates during the 1980s, a drop that has been more than offset by a nearly 10 percentage point increase during the past ten years. A similar trend is evident among Hispanics, whose 1997 college participation rate also is considerably higher than those posted during the late 1970s and 1980s.

Between 1996 and 1997, African-American and Hispanic high school graduates ages 18 to 24 recorded moderate gains in college participation, posting rates of 39.8 percent and 36 percent, respectively. Outpacing their African-American and Hispanic peers, 45.3 percent of all white high school graduates in this age group were enrolled in college in 1997.

Figure 3

Enrolled-in-College Participation Rates for 18- to 24-Year-Old High School Graduates, by Race and Ethnicity: 1977 to 1997



Source: U.S. Department of Commerce, Bureau of the Census. *School Enrollment–Social and Economic Characteristics of Students: October 1997.* Current Population Reports, Series P-20, 1998.

African Americans

• Fueled by gains among women, African Americans improved their college-going rates considerably during the 1990s. Their 39.8 percent participation rate in 1997 reflected an increase of nearly 4 percentage points from the previous year. After declining during the early to mid-1980s, African-American college participation rates have increased nearly 7 percentage points since 1990. African Americans' participation rate in 1997 also was more than 8 percentage points above that of two decades before.

• Between 1996 and 1997, the college participation rate of African-American male high school graduates remained largely unchanged, at roughly 35 percent (Table 2). During the past decade, this rate has fluctuated almost annually, resulting in little net gain since 1990.

• African-American females registered a large one-year gain in college participation, from 36.4 percent in 1996 to 43.6 percent in 1997. The 1997 rate is the highest ever recorded by African-American women. However, readers should view the information cautiously because of frequent year-to-year fluctuations in statistical data.

• In 1997, African Americans had the largest gender gap in college participation rates of the three major ethnic groups. The more than 8 percentage point gap between the rates for African-American women and men also reflected a significant change from 1996, when the gap was only 1 percentage point.

• African Americans attained their highest "ever-enrolled-in-college" rate in 1997. CPS data show that 60 percent of African Americans ages 14 to 24 reported enrolling in postsecondary education at some point in their lives, a significant increase

from the 54.6 percent who so reported the previous year (Table 1). The 1997 rate is above the previous record high of 59.2 percent recorded in 1994 and reflects an increase of 12 percentage points since 1990.

• The number of African-American male high school graduates ages 14 to 24 who attended college at some point in their lives increased from 53.7 percent in 1996 to 56.3 percent in 1997 (Table 2).

• In 1997, 63 percent of African-American female high school graduates ages 14 to 24 reported attending college at some point during their lives. The percentage of African-American women who have attended college for at least a year increased more than 15 points between 1990 and 1997.

Hispanics

• College participation rates for Hispanic high school graduates ages 18 to 24 increased by only 1 percentage point, to 36 percent, in 1997 (Table 1). However, since 1990, Hispanics' college-going rate has increased by nearly 8 percentage points.

• The college participation rate for Hispanic men increased by more than 2 percentage points from 1996 to 1997 (30.2 percent and 32.5 percent, respectively), while the corresponding rate for Hispanic women remained virtually unchanged (39.6 percent and 39.7 percent, respectively) (Table 2).

• With their 1997 gain, Hispanic men narrowed the gender gap in college participation to 7 percentage points, down from 9 percentage points the previous year.

• Hispanics' "ever-enrolled-in-college" rate increased slightly from 1996 to 1997, from 52.5 percent to 54.3 percent (Table 1). The 1997 rate also is nearly 10 percentage points above the rate recorded in 1990.

• Hispanic men and women experienced minor increases in their "ever-enrolled-in-college" rates in 1997 (Table 2). The "ever-enrolled" rate for females was 59.6 percent in 1997, a slight increase from the previous year and the same as that posted in 1995. The "ever-enrolled" rate for men was largely unchanged from the previous year (49.2 percent and 48.8 percent in 1997 and 1996, respectively).

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• A sizable gender gap in Hispanic men's and women's "ever-enrolled-in-college" rates persists. The 59.6 percent rate for Hispanic women in 1997 was more than 10 percentage points above the 49.2 percent rate for Hispanic men that year.

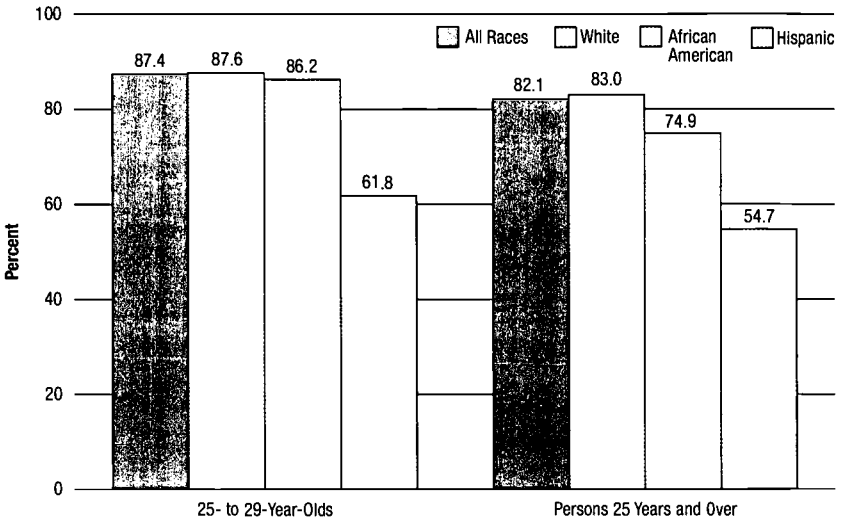
EDUCATIONAL ATTAINMENT

As in previous status reports, this section highlights the educational attainment of persons ages 25 and older–particularly members of the 25- to 29-year-old population who attended high school and college during the preceding decade. The report uses data from the Census Bureau's March 1997 Current Population Survey on Educational Attainment.

Nationwide, the proportion of adults ages 25 to 29 who have completed four or more years of high school has changed little during the past two decades (Table 3). In 1997, more than 87 percent of Americans in this age group had completed high school, an increase of less than 2 percentage points over the 1988 rate of 85.7 percent. While the percentage of whites ages 25 to 29 who had completed four or more years of high school remained relatively unchanged during the 1990s, African Americans made major strides, thus narrowing the gap with whites in this category. In 1990, the percentage of African Americans ages 25 to 29 who had completed four or more years of high school trailed that of whites by nearly 5 points. However, since 1995, the two groups have posted similar high school completion rates among young adults ages 25 to 29 years old.

Figure 4

High School Completion Rates for 25- to 29-Year-Olds and for Persons 25 Years and Over, by Race and Ethnicity: 1997



Source: U.S. Department of Commerce, Bureau of the Census. *Educational Attainment in the United States.* Current Population Reports, P-20 Series, 1998.

At only 61.8 percent, the percentage of Hispanic 25- to 29-year-olds with four or more years of high school trails those for whites and African Americans significantly (Figure 4). Despite gains during the 1990s, Hispanics in 1997 trailed African Americans and whites by more than 20 percentage points.

Among all Americans ages 25 and older, 82.1 percent had completed four or more years of high school as of 1997–a small increase from the previous year (Figure 4). The percentages of African Americans and Hispanics with four or more years of high school were up slightly for 1997, while the corresponding percentage of whites remained constant.

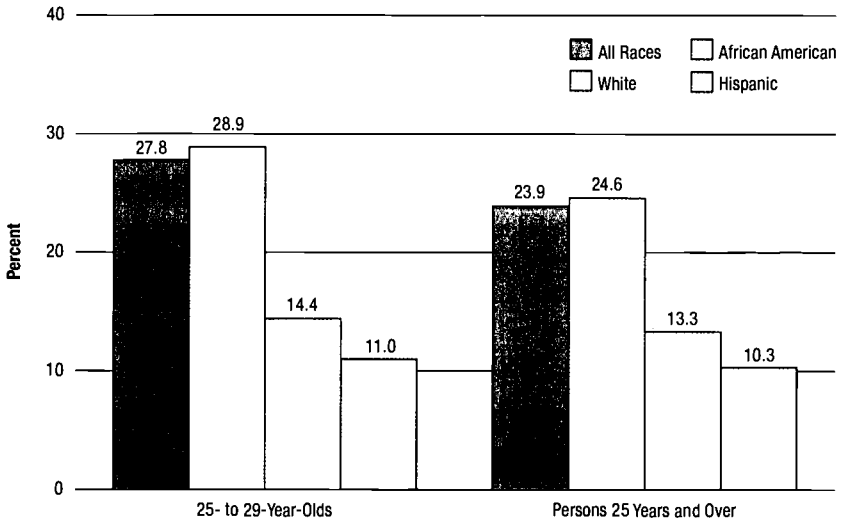
CPS data indicate that 27.8 percent of all young adults ages 25 to 29 held a bachelor's degree or higher as of 1997 (Table 3). The percentage of persons ages 25 to 29 who had at least a bachelor's degree hovered around 23 percent during the early 1990s. During the past three years, the percentage has increased to 27.8 percent.

African Americans and Hispanics trailed whites significantly in the percentage of adults ages 25 to 29 with a bachelor's or higher degree. Approximately 29 percent of whites in this age group held at least a baccalaureate degree in 1997, compared with 14.4 percent of African Americans and only 11 percent of Hispanics (Figure 5).

Nearly 24 percent of all persons age 25 and older held a bachelor's or higher degree in 1997–a figure virtually unchanged from the previous year. Hispanics and whites in this age group registered minimal one-year gains in the percentage of persons who had a bachelor's or

Figure 5

College Completion Rates for 25- to 29-Year-Olds and for Persons 25 Years and Over, by Race and Ethnicity: 1997



Source: U.S. Department of Commerce, Bureau of the Census. *Educational Attainment in the United States.* Current Population Reports, P-20 Series, 1998.

higher degree in 1997, while the rate for African Americans decreased slightly.

African Americans

• The percentage of African-American men ages 25 to 29 with four or more years of high school decreased from 87.2 percent in 1996 to 85.2 percent 1997 (Table 3). Despite year-to-year fluctuations, however, the rate for African-American men has increased by nearly 4 percentage points since 1990.

• The percentage of African-American women ages 25 to 29 with four or more years of high school increased by nearly 3 percentage points from 1996 to 1997, to 87.1 percent–an increase of more than 5 percentage points since 1990.

• In 1997, a higher percentage of African Americans ages 25 to 29 had at least a bachelor's degree than did a decade ago. The 1997 rate of 14.4 percent reflects increases of 3 percentage points over the past decade and 1 percentage point since 1990.

• Despite overall progress during the preceding decade, African Americans in 1997 continued to trail whites in the percentage of 25- to 29-year-olds who had completed four or more years of college. The 1997 African-American baccalaureate attainment rate of 14.4 percent was half that of whites, of whom 28.9 percent held a bachelor's or higher degree.

• The proportion of African-American men ages 25 to 29 who had at least a bachelor's degree decreased slightly in 1997, to 12.1 percent, while the corresponding rate for women remained unchanged at 16.4 percent. The 1997 rate for African-American men reflects a decrease of more than 5 percentage points over the preceding two years.

• In 1997, approximately 75 percent of African Americans age 25 and older had completed four or more years of high school, a slight improvement over the 1996 rate.

• The increase in the percentage of African Americans ages 25 and older who had completed high school is attributable to progress made by African-American women, whose high school completion rate increased by nearly 2 percentage points from 1996 to 1997; the rate for African-American men decreased by nearly a percentage point. As a result, African-American women in 1997 posted a higher completion rate than African-American men, though they had posted nearly equal rates in 1996.

• Among African Americans ages 25 and older, the proportion completing four-year degrees held relatively steady, at 13.6 percent in 1996 and 13.3 percent in 1997. The baccalaureate attainment rate for women in this age group decreased slightly, while the rate for men was largely unchanged.

Hispanics

• The proportion of Hispanics ages 25 to 29 who had completed four or more years of high school was 61.8 percent in 1997. Hispanics continue to trail whites and African Americans significantly in this category. The 1997 high school completion rate for Hispanics is similar to those posted during the late 1980s.

• The percentage of 25- to 29-year-old Hispanic men with four or more

years of high school decreased in 1997–the fourth decrease during the past five years. In 1997, fewer than 60 percent of Hispanic men in this age group had completed a high school education.

• The percentage of 25- to 29-year-old Hispanic females with four or more years of high school increased by 2 percentage points from 1996 to 1997, to 64.9 percent. The 1997 rate reflects an overall increase since 1990 and is similar to rates posted in the early 1990s.

• The proportion of Hispanics ages 25 to 29 with a bachelor's or higher degree increased slightly, from 10 percent in 1996 to 11 percent in 1997. Although the 1997 rate was the highest for Hispanics since 1988, it is still dismally low.

• Fewer than 10 percent of Hispanic men ages 25 to 29 had completed four or more years of college in 1997; white men ages 25 to 29 were nearly three times more likely than Hispanic men in this age group to hold a bachelor's degree.

• After a one-year reversal in 1996, Hispanic women ages 25 to 29 again had a slightly higher baccalaureate attainment rate than Hispanic men. The 10.1 percent baccalaureate attainment rate for Hispanic women in 1997 represented a small increase over the previous year.

• Among Hispanics ages 25 and older, 54.7 percent had completed four or more years of high school in 1997, a rate that trailed those of whites and African Americans by more than 20 percentage points. Despite the wide gap in the high school completion rate of Hispanics 25 years old and older and those of whites and African Americans in the same age group, the 1997 rate for Hispanics was up slightly from the previous year.

• The proportion of Hispanic women ages 25 and older with a bachelor's or higher degree increased from 8.3 percent to 10.1 percent from 1996 to 1997. The baccalaureate attainment rate among Hispanic men also increased, but by a smaller margin than for Hispanic women.

• In 1997, just over 10 percent of all Hispanics ages 25 and older held at least a bachelor's degree, a rate that trailed those for whites and African Americans. Hispanic men remained slightly more likely than Hispanic women to complete college. □

College Enrollment

Since the late 1980s, students of color have made varied but steady progress in college attendance (Figure 6). From 1988 to 1997, the overall enrollment of students of color in higher education increased 57.2 percent, including an increase of 16.1 percent during the past five years. From 1996 to 1997, students of color registered an enrollment increase of 3.7 percent (Table 4).

Overall college enrollment figures remained largely unchanged from 1996 to 1997, continuing a stagnation in higher education enrollments that has been ongoing throughout the 1990s. The main factor in this stagnation is a lack of enrollment increases among whites, a consequence of the smaller number of white youths in the college-age population. Since 1993, the number of white students enrolled in college has decreased by 3.1 percent, while total college enrollment has increased by only 1.4 percent. This small increase includes a 1.8 percent increase at four-year institutions and a 0.7 percent increase at two-year colleges.

Though the gains were smaller than in recent years, both men and women of color recorded enrollment gains in higher education between 1996 and 1997 (Figure 7). College enrollment among minority women increased 4 percent from 1996 to 1997, mirroring the gains of the previous two years but remaining below increases registered between 1988 and 1994. A similar trend occurred among men of color, for whom a 3.2 percent increase from 1996 to 1997 was overshadowed by progress earlier in the decade (Table 5).

Enrollment among students of color increased from 1996 to 1997 at the undergraduate, graduate, and professional school levels (Table 6).

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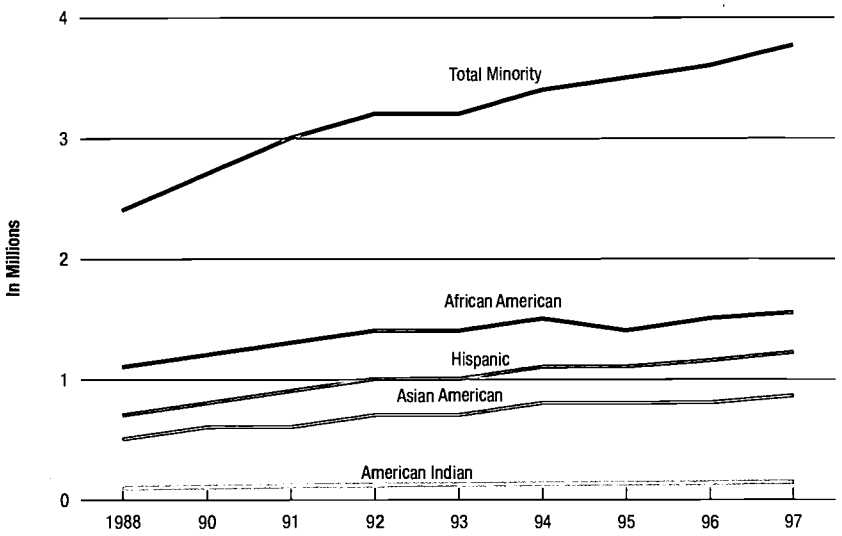
The largest gain–8.9 percent–occurred in professional schools. Students of color also posted enrollment increases of 5.6 percent and 3.5 percent at the graduate and undergraduate levels, respectively.

Students of color posted slightly larger one-year enrollment increases at independent institutions (5.4 percent) than at public colleges and universities (3.3 percent) (Table 5). Nevertheless, public colleges and universities continue to enroll the vast majority of students of color in higher education. Slightly more than four of every five minority students–80.7 percent–attended public institutions in 1997, compared with 76.5 percent of white students.

Figure 6

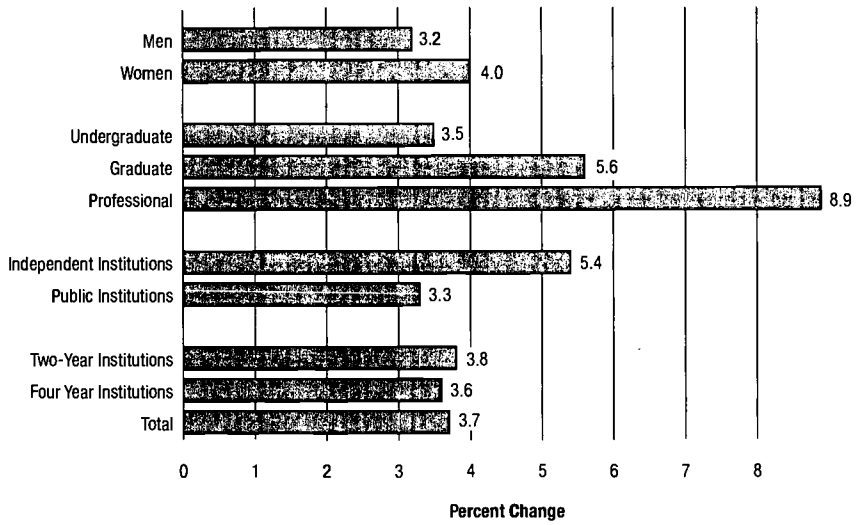
Minority Enrollment in Higher Education, by Race and Ethnicity: 1988 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

Figure 7

Changes in Minority Enrollments by Gender, Degree Level, and Type of Institution: 1996 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

African Americans

• During the past five years, African-American enrollment in higher education has increased nearly 10 percent, to 1,551,000 students (Table 4). Although this progress is to be applauded, their gain is the smallest among the nation's four major ethnic minority groups. In 1997, African Americans represented 10.7 percent of all college students, up from 9.9 percent five years previously.

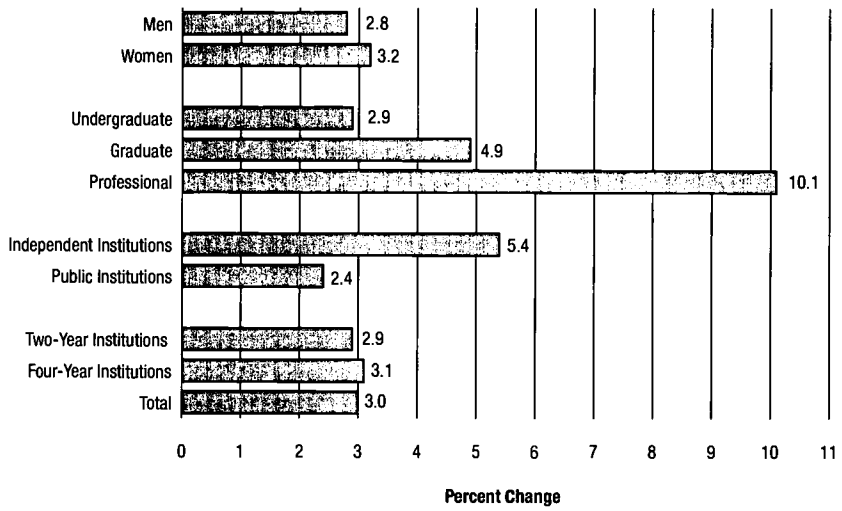
• A 3 percent enrollment increase by African Americans from 1996 to 1997 included gains of 3.2 percent for women and 2.8 percent for men (Figure 8). Again, these gains were the smallest among men and women within the four ethnic minority groups (Table 5).

• Within professional schools, African Americans realized an impressive one-year enrollment increase of 10.1 percent from 1996 to 1997, reversing a previous enrollment decline in this category (Table 6).

• Undergraduate enrollment of African Americans increased 2.9 percent in 1997. Since 1993,

Figure 8

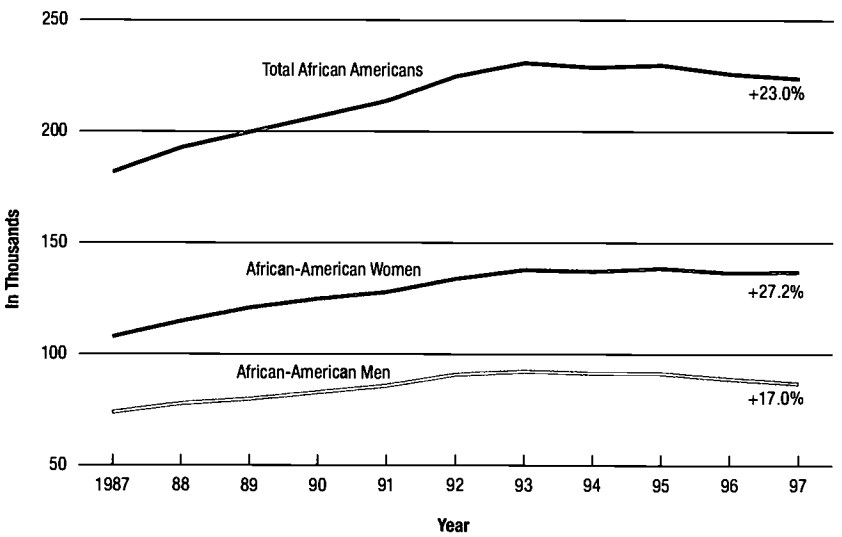
Changes in African-American Enrollments by Gender, Degree Level, and Type of Institution: 1996 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

Figure 9

African-American Enrollment at Historically Black Colleges and Universities: 1987 to 1997



Source: National Association for Equal Opportunity Research Institute. Annual Fall Enrollment Surveys, 1987-1997.

African Americans have realized an undergraduate enrollment increase of 8.3 percent, less than half the rates of increase made by Hispanics, Asian Americans, and American Indians during the same period.

• African-American women achieved an 11.8 percent enrollment increase between 1993 and 1997, including a one-year gain of just over 3 percent from 1996 to 1997 (Table 5).

• African-American enrollment at independent institutions increased by more than 5 percent from 1996 to 1997, a gain similar to those of other ethnic minority groups. During the preceding five years, African-American enrollment at independent institutions increased by nearly 16 percent, compared to an 8.2 percent increase at public institutions.

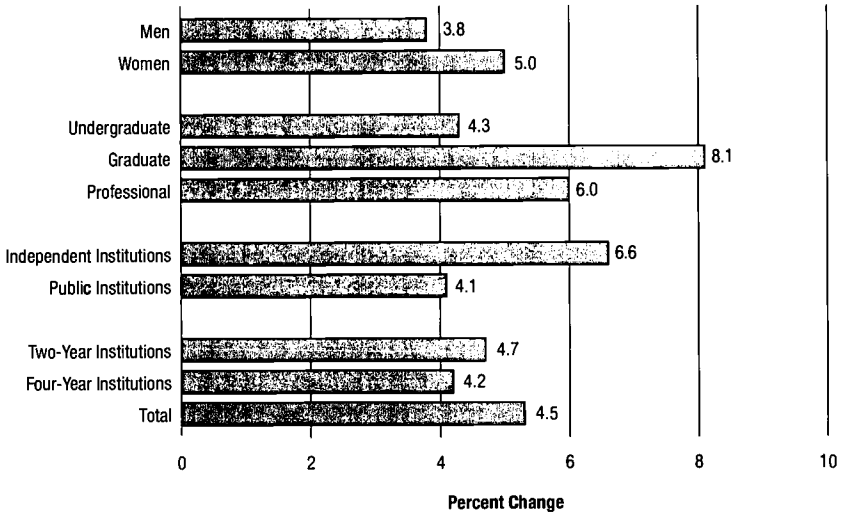
• Despite enrollment gains at independent colleges and universities, lower-cost public institutions enroll the vast majority of African-American students. Public institutions enrolled nearly 78 percent of African-American college students in 1997.

• African-American enrollment at historically black colleges and universities (HBCUs) decreased slightly for the second consecutive year (Table 7). The decrease of nearly 1 percentage point was the third decrease in the preceding four years. From 1987 to 1997, however, African Americans experienced a 23 percent increase in enrollment at HBCUs (Figure 9).

• The percentage of African Americans enrolling at HBCUs, compared with other types of institutions, continues to decrease. In 1997, HBCUs enrolled 14.4 percent of all African Americans attending U.S. colleges and universities, down from 15 percent in 1996 and 17 per-

Figure 10

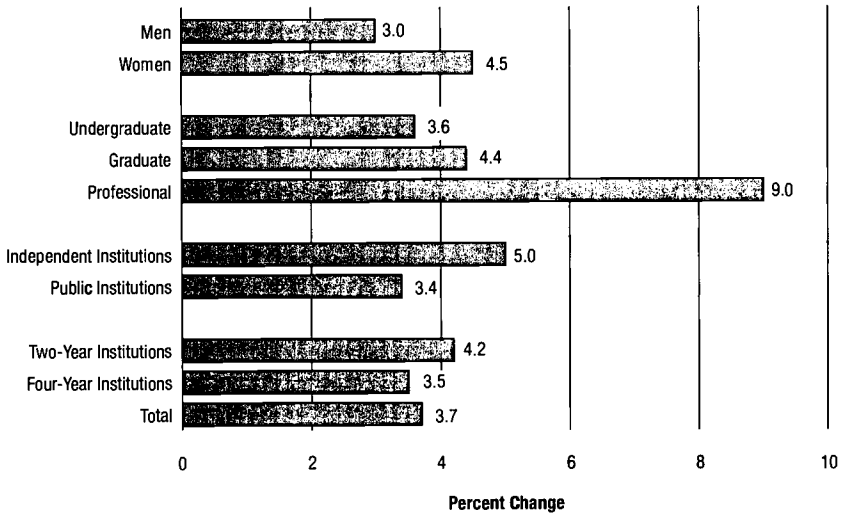
Changes in Hispanic Enrollments by Gender, Degree Level, and Type of Institution: 1996 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

Figure 11

Changes in Asian-American Enrollments, by Gender, Degree Level, and Type of Institution: 1996 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

cent in 1988. Nevertheless, these institutions continue to play a vital role in the education of African Americans.

• African-American men experienced a 2 percent enrollment decrease at HBCUs between 1996 and 1997, while enrollment by women was virtually unchanged (Table 8). African-American men's and women's enrollment rates decreased slightly at public HBCUs (3.9 and 1.4 percent, respectively), whereas their combined enrollment increased 2.5 percent at independent HBCUs.

Hispanics

• Total enrollment among Hispanics in higher education increased 79.2 percent from 1988 to 1997 (Table 4). This increase, the highest among the four major ethnic groups, mirrors the increase in the U.S. population of Hispanic college-age youths, who have more than doubled in number since 1977. In 1997, 1.2 million Hispanic Americans were enrolled in college, up from 680,000 nine years previously.

• From 1996 to 1997, Hispanic college students again had the highest enrollment increase of all racial and ethnic groups–4.5 percent. Overall, Hispanics achieved a 23.2 percent increase in college enrollment during the previous five years.

• Hispanics registered one-year enrollment increases of 4.7 percent and 4.2 percent at two- and four-year institutions, respectively (Figure 10). Since 1993, Hispanic enrollments at both two- and four-year institutions have increased more than 20 percent.

• Hispanic women continue to outpace Hispanic men in enrollment growth (Table 5). However, both groups have registered sizable increases during the most recent five years for which data are available. Since 1993, Hispanic women's college enrollment has increased by

26.5 percent, and Hispanic men's by 19.2 percent.

• In 1997, Hispanic students experienced a larger percentage increase at independent colleges and universities than at public institutions. However, in 1997, nearly 85 percent of Hispanic students attended lower-cost public institutions.

• The number of Hispanic graduate students increased 8.1 percent between 1996 and 1997, compared with a 4.3 increase in the number of Hispanic undergraduates (Table 6). Hispanics' enrollment increases at both levels were the highest among all racial and ethnic groups. A 6 percent increase in professional school enrollments between 1996 and 1997 contributed to Hispanics' overall enrollment gains in higher education.

UNIVERSITY OF GEORGIA

Asian Americans

• Asian-American enrollment in higher education increased 73 percent from 1988 to 1997, bringing the number of Asian Americans enrolled in college to 859,000 in 1997 (Table 4).

• In 1997, the 4.2 percent enrollment increase for Asian Americans at two-year institutions was slightly higher than the 3.5 percent increase at four-year colleges and universities (Figure 11). Nevertheless, the majority of Asian-American students–60.4 percent–attended four-year colleges. This trend has remained fairly constant for ten years.

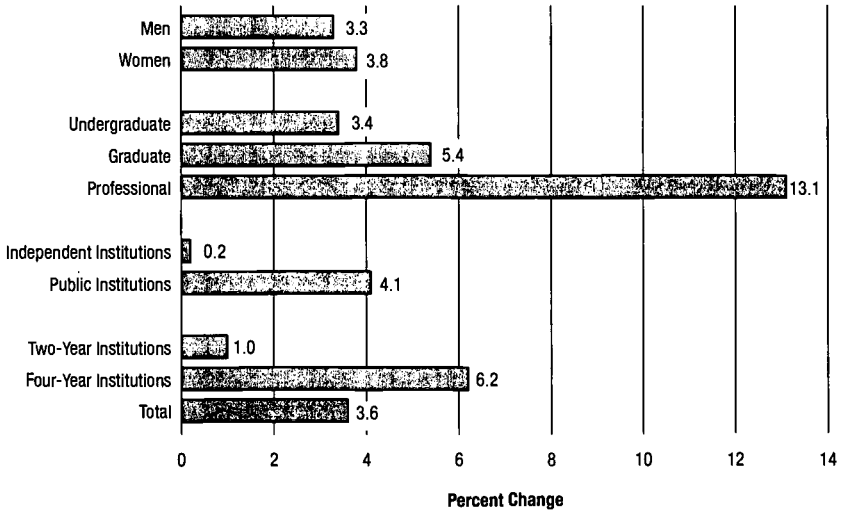
• For the fourth consecutive year, Asian-American women had slightly greater representation in higher education than Asian-American men (Table 5). In 1997, 51.3 percent of all Asian-American college students were women. During the preceding five years, Asian-American women achieved a 22.2 percent enrollment increase, compared to a 15 percent increase by Asian-American men.

• Enrollment of Asian-American students at independent institutions increased nearly 30 percent from 1993 to 1997, including an increase of 5 percent from 1996 to 1997. However, like members of other ethnic groups, the vast majority of Asian-American students–79.2 percent–attend public institutions.

• From 1996 to 1997, Asian Americans registered a 9 percent enrollment increase at professional schools, more than double the 4.4

Figure 12

Changes in American Indian Enrollments, by Gender, Degree Level, and Type of Institution: 1996 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

percent and 3.6 percent increases they attained at the graduate and undergraduate levels (Table 6).

American Indians

• American Indians experienced a 54 percent increase in college enrollment during the past decade, including a gain of 3.6 percent from 1996 to 1997, which brought the total enrollment of American Indians in higher education to 142,000 (barely 1 percent of all college students) (Table 4).

• In 1997, for the first time, slightly more American Indians were enrolled at four-year than at two-year institutions. American Indian enrollment at four-year institutions increased 6.2 percent from 1996 to 1997, compared with a 1 percent enrollment increase at two-year institutions (Figure 12).

• American Indian women and men posted enrollment increases of 3.8 percent and 3.3 percent, respectively, from 1996 to 1997 (Table 5). During the previous five-year period, enrollment of American Indian women increased 18.3 percent, slightly more than the 15.3 percent increase by American Indian men.

• American Indian enrollments at public institutions from 1996 to 1997 increased 4.1 percent, while their enrollment at independent institutions was unchanged. In 1997, more than 87 percent of American Indians enrolled in higher education attended public colleges and universities.

• The 13.1 percent enrollment increase among American Indians at the professional-school level was the highest among the four major ethnic groups in 1997 (Table 6).

• From 1996 to 1997, enrollments of American Indians increased 5.4 percent at graduate schools and 3.4 percent at undergraduate institutions. From 1993 to 1997, graduate enrollment among American Indian students increased 28.3 percent, nearly double the 16.1 percent increase at the undergraduate level. However, with only 9,000 American Indians enrolled in graduate education and only 2,000 enrolled in professional schools, their representation at these levels remains extremely low. ■

College Graduation Rates

This section analyzes six-year college graduation rates for African-American, Hispanic, Asian-American, American Indian, and white students who were freshmen in 1991–92 as reported in 1997. These data are collected and analyzed by the National Collegiate Athletic Association (NCAA). Colleges and universities gather information to enable the NCAA to compare their students' and student/athletes' graduation rates. These data are analyzed by NCAA divisional status, race, and gender, as well as by public and independent institutional status. As in prior years, the data analyzed in this report focus on students enrolled at Division I institutions.

Nationwide, students at Division I institutions in 1997 posted a six-year graduation rate of 56 percent, a rate unchanged from the previous year (Table 9). With 65 percent of Asian-American students completing college, this group had the highest graduation rate of all racial and ethnic groups (Figure 13). White students followed Asian Americans with a graduation rate of 58 percent, while the rates for Hispanics, African Americans, and American Indians trailed both of those groups'. From 1996 to 1997, African Americans registered a small increase in their college completion rate, while that for Hispanics remained unchanged. American Indians experienced a slight decrease in their college graduation rate for the year (Figure 14).

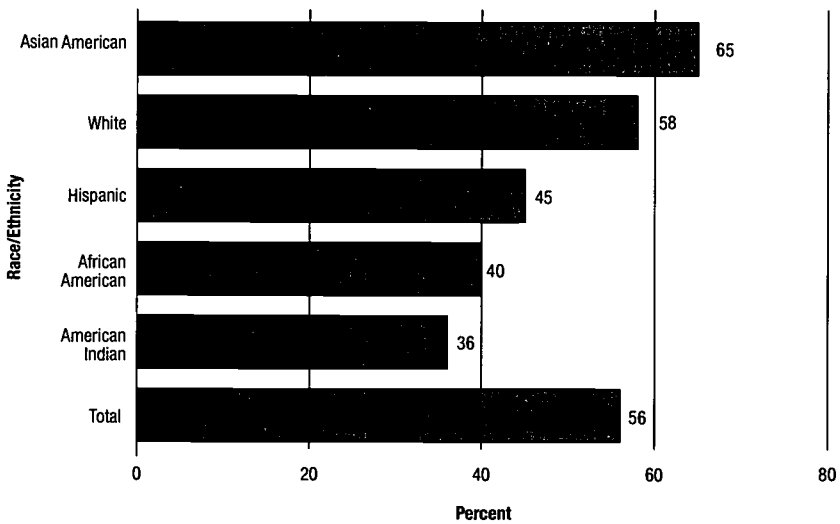
African Americans

- The six-year graduation rate for African Americans at Division I institutions increased from 38 percent in 1996 to 40 percent in 1997 (Table 9). As a result, African Americans resumed an upward trend evident from 1992 through 1995. Between 1992 and 1997, with a total increase of 6 percentage points, African Americans experienced the greatest progress of all racial and ethnic groups in terms of increasing their college graduation rate.

- In 1997, African-American women at NCAA Division I institutions continued to post higher college graduation rates than African-

Figure 13

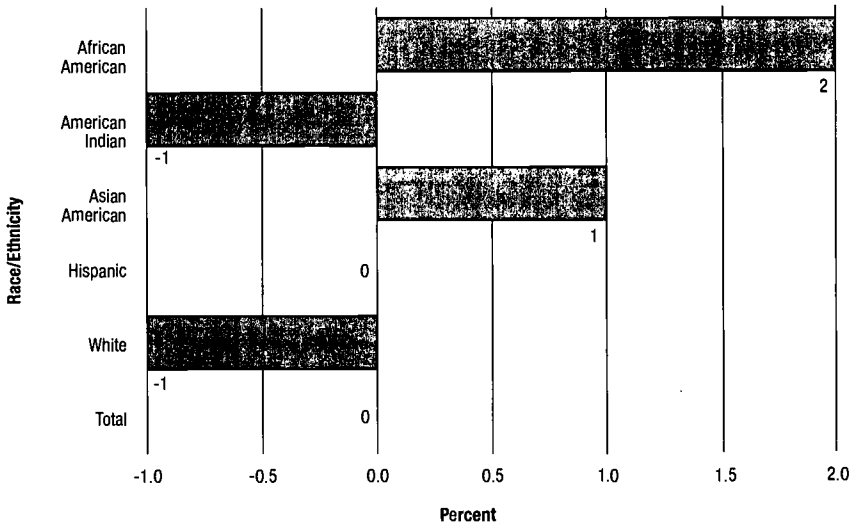
NCAA Division I Six-Year Graduation Rates, by Race and Ethnicity: 1997



Source: National Collegiate Athletic Association. Division I Graduation Rates Report, 1998.

Figure 14

Changes in NCAA Division I Six-Year Graduation Rates: 1996 to 1997



Source: National Collegiate Athletic Association. Division I Graduation Rates Reports, 1997 and 1998.

American men. The graduation rate for African-American women was 45 percent in 1997, compared to 34 percent for African-American men. The gap in the college completion rates of African-American men and women is the largest among all racial and ethnic groups.

• The graduation rate for African-American women increased by 9 percentage points from 1992 to 1997, the largest gain by women among all groups. The graduation rate for African-American men increased by 4 percentage points during the same period. This increase was the largest among minority men.

• Following national trends for all students, African Americans continued to post higher graduation rates at independent institutions than at public institutions. In 1997, 52 percent of African Americans at Division I independent institutions graduated within the NCAA's six-year time frame, compared with only 38 percent of those attending public colleges and universities.

• Despite gains during the most recent two-year period for which data are available, African Americans at independent colleges still had the lowest graduation rate among all racial and ethnic groups in 1997.

Hispanics

• The college completion rate for Hispanics at Division I colleges and universities remained unchanged from 1996 to 1997, at 45 percent. Since the early 1990s, Hispanics have experienced little change in their college graduation rate.

• The graduation rate for Hispanic men increased slightly in 1997, while that for Hispanic women decreased slightly. Hispanic women posted a 47 percent graduation rate in 1997, a decrease of 1 percentage point from the previous year, while Hispanic men registered a 1 percentage point gain, to 43 percent.

• Like other students, Hispanics continue to show significantly higher graduation rates at independent than at public institutions. The graduation rate for Hispanics at independent institutions was 64 percent in 1997, while that at public colleges and universities was 40 percent; this 24 percentage point difference was the largest among all groups in 1997.

Asian Americans

• In 1997, Asian Americans had the highest graduation rate among all racial and ethnic groups at Division I colleges and universities: 65 percent. The 1997 figure amounted to an increase of 1 percentage point from the previous year.

• Asian-American women had the highest six-year graduation rate of any group: 68 percent of all Asian-American women who entered a four-year institution completed college within six years. Asian-American women's 1997 graduation rate was 2 percentage points higher than their 1996 rate.

• Likewise, Asian-American men's 62 percent graduation rate at Division I institutions was the highest among men in all racial/ethnic groups surveyed.

• In 1997, Asian Americans' graduation rates were 78 percent at independent institutions and 61 percent at public colleges and universities.

American Indians

• In 1997, American Indians again had the lowest graduation rate among all groups at Division I colleges and universities. Their 1997 graduation rate of 36 percent is identical to that reported in 1993.

• The graduation rate for American Indian women increased slightly, to 38 percent, in 1997. This reflects an increase of 6 percentage points since 1992.

• In 1997, American Indian men experienced the second consecutive decrease in their Division I graduation rates. The 32 percent rate for 1997 reflected a decrease of 3 percentage points from the rate posted the previous year and of 5 percentage points from the rate posted in 1995.

• Between 1996 and 1997, American Indian graduation rates at public and independent colleges and universities were unchanged. American Indians posted a 54 percent graduation rate at independent institutions and a 33 percent graduation rate at public colleges and universities for both years. ■

CITY COLLEGE OF SAN FRANCISCO

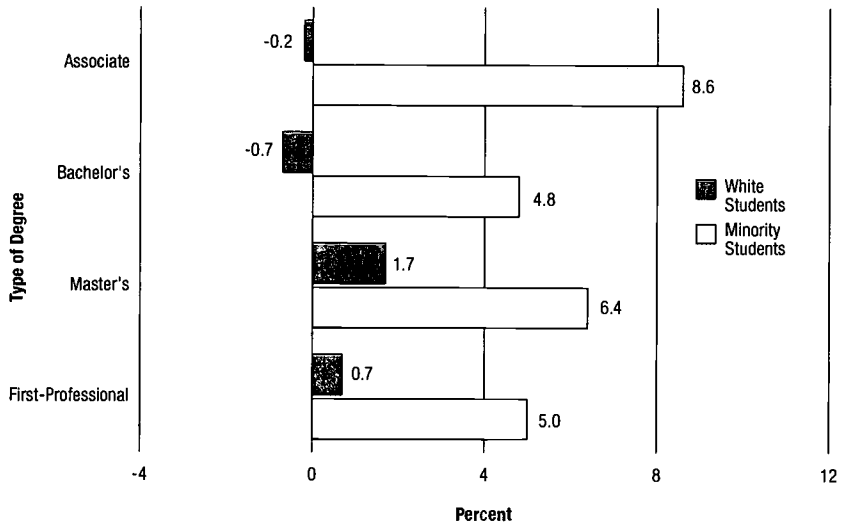
Degrees Conferred

Since the late 1980s, students of color have earned increasing numbers of degrees. Although the rate of growth has varied considerably among the four major ethnic minority groups, they have made gains as a group at every degree level. Since 1987, minority students have outpaced white students in their rate of increase at all degree levels. As a result, the proportion of bachelor's degrees awarded to students of color increased from 12.1 percent in 1987 to 19.8 percent in 1997, while the percentage of first-professional degrees awarded to minorities increased from 11.2 percent to 21 percent during the same period. Nevertheless, compared with their enrollments, students of color remain underrepresented at every degree level.

This year's report provides updated information based on new data from the National Center for Education Statistics (NCES) and other sources. This report includes NCES data on associate, bachelor's, master's, and first-professional degrees. Data on doctoral degrees are provided through the National Research Council's (NRC) Survey on Earned Doctorates.

Figure 15

Changes in Numbers of Degrees Awarded to Minority and White Students, by Type of Degree: 1996 to 1997



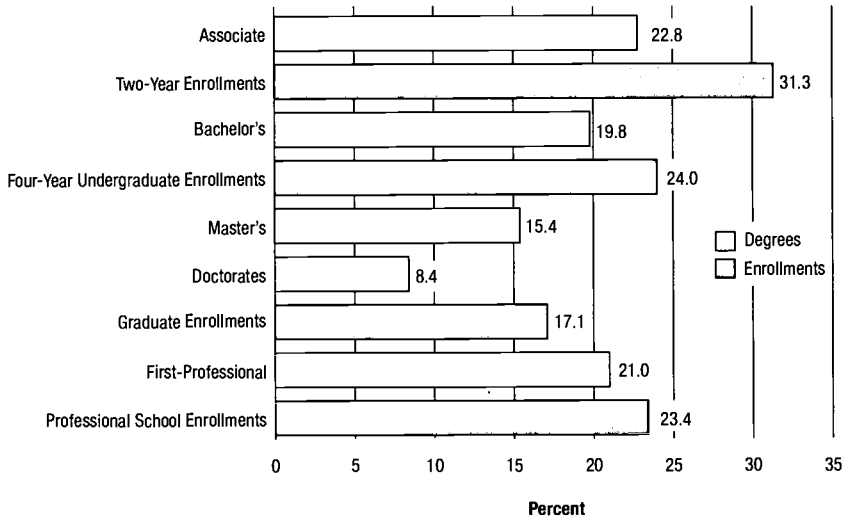
Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999.

As a group, students of color made progress in all degree categories from 1996 to 1997, led by an 8.6 percent increase at the associate degree level (Figure 15). Students of color also experienced combined increases of 4.8 percent in the number of bachelor's degrees earned, 6.4 percent in the number of master's degrees earned, and 5 percent in the number of first-professional degrees earned. During this one-year period, the rate of degree growth among students of color far exceeded that of white students at all degree levels. Whites achieved slight increases in the number of master's and first-professional degrees earned in 1997, while they earned slightly fewer bachelor's degrees; the number of associate degrees awarded to whites was virtually unchanged.

Both men and women of color recorded moderate gains in all degree categories between 1996 and 1997. Led by increases of 9.5 percent at the master's degree level

Figure 16

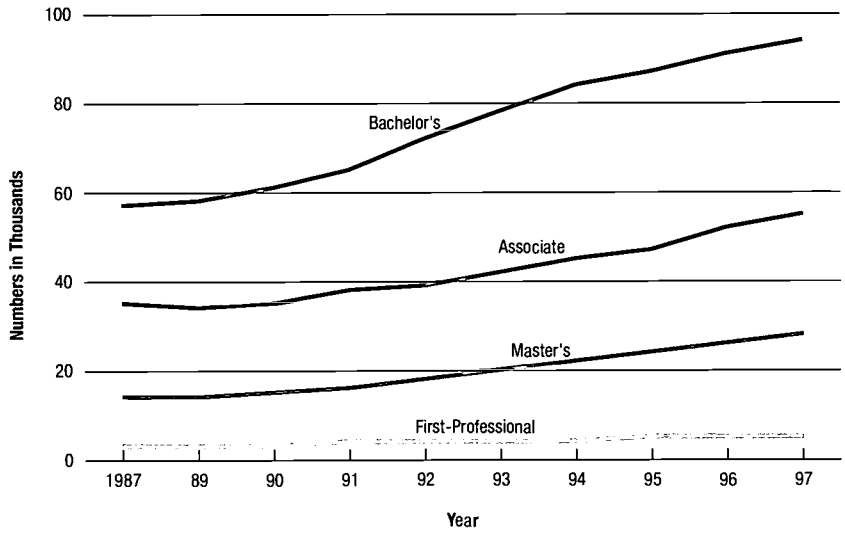
Minority Share of Enrollments and Degrees Conferred, by Degree Level: 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999, and Enrollment in Higher Education: Fall 1987 through Fall 1997.

Figure 17

Degrees Awarded to African Americans, by Type of Degree: 1987 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999.

and 9 percent at the associate degree level, women of color posted larger gains than men of color at each degree level.

Students of color realized gains in the share of degrees conferred to them in 1997. Minorities earned 19.8 percent of all bachelor's degrees in 1997, up just under 1 percentage point from 1996 and more than 4 percentage points since 1993 (Table 11). Yet students of color accounted for 24 percent of all four-year undergraduates in 1997 (Figure 16).

Similar trends were evident at all other degree levels. For example, students of color earned 21 percent of all first-professional degrees in 1997, continuing a steady increase from 16.8 percent in 1993 and 11.2 percent in 1987 (Table 13). Minorities represented 23.4 percent of all first-professional students enrolled in 1997 (Figure 16).

At the master's level, students of color also have achieved proportional gains throughout the 1990s. They earned 15.4 percent of all master's degrees awarded in 1997, up from 12.4 percent in 1993 and 10.6 percent in 1987 (Table 12). Minorities accounted for 17.1 percent of graduate enrollment in 1997 (Figure 16).

At the associate degree level, students of color accounted for 22.8 percent of all graduates in 1997, the third consecutive year they have represented more than 20 percent of all degree recipients. The 22.8 percent rate in 1997 was up more than 1 percentage point from 1996, more than 4 percentage points from 1993, and nearly 7 percentage points from

1987. But compared to their share of two-year college enrollments (31.3 percent in 1997), students of color remain underrepresented in degree awards (Figure 16).

SEATTLE COMMUNITY COLLEGES

African Americans

• African Americans experienced small to moderate growth in all degree categories for 1997, ranging from a 3.2 percent increase at the bachelor's degree level to a 10.2 percent increase at the master's degree level (Tables 11 and 12).

• The 3.2 percent increase at the bachelor's level in 1997 was the smallest increase among the four ethnic minority groups, a trend that has been evident throughout the 1990s (Table 11).

• African-American women posted larger one-year increases than African-American men in all major degree categories in 1997. The gains by African-American women ranged from a low of 3.8 percent at the bachelor's degree level to a high of 11.5 percent at the master's level (Tables 11 and 12). Gains by African-American men ranged from a 2 percent increase in the number of bachelor's degrees earned to a 6.4 percent increase in the number of associate degrees earned.

• After decreasing in the early to mid-1980s, the number of African Americans earning bachelor's degrees has increased steadily since 1987 (Figure 17). The 66.3 percent increase in the number of bachelor's degrees earned by African Americans from 1987 to 1997 is a considerably greater gain than their undergraduate enrollment increase of 34.6 percent during approximately the same period. Despite this progress, however, African Americans received only 8.1 percent of all bachelor's degrees awarded in 1997, though they represented more than 11.2 percent of all undergraduate students (Tables 11 and 6).

• African Americans at historically black colleges and universities (HBCUs) experienced some gains and some losses in degree categories from 1996 to 1997 (Table 14). Gains included a 10.5 percent increase in the number of master's degrees earned and a 5.2 percent increase in the number of first-professional degrees earned. African Americans showed the greatest decrease in the number of baccalaureate degrees earned–7.6 percent–compared with virtual stagnation at the associate level. Nationwide, HBCUs awarded 27.3 percent of all bachelor's degrees, 15.6 percent of all master's degrees, and 17 percent of all first-professional degrees earned by African Americans in 1997.

Hispanics

• Continuing their upward trend (Figure 18), Hispanics recorded gains in all degree categories in 1997, ranging from a low of 2.2 percent in the number of first-professional degrees earned to a high of 11.7 percent in the number of associate degrees earned.

• The 6.3 percent increase in the number of bachelor's degrees earned by Hispanics in 1997 was comparable to the increase experienced by American Indians; it outstripped the rates of increase of other racial and ethnic groups (Table 11). During the past ten years, the number of Hispanics earning bachelor's degrees has more than doubled.

• An 11.7 percent increase in the number of associate degrees earned by Hispanics in 1997 was the largest one-year increase at this level among all racial and ethnic groups (Table 10). Both Hispanic men and women contributed to the increase.

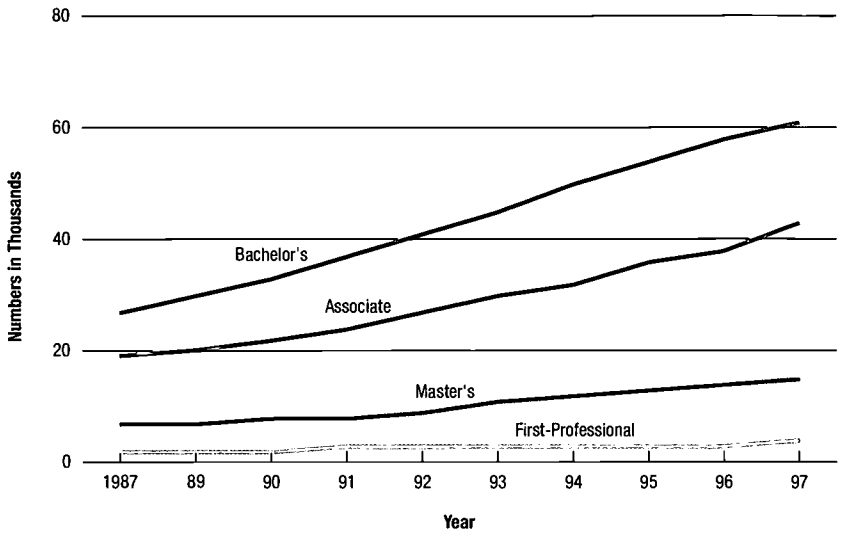
• Except at the associate degree level, Hispanic women achieved larger gains than Hispanic men in all levels of degree awards in 1997. The women's gains ranged from a low of 4.8 percent at the first-professional level to a high of 11.6 percent at the associate degree level.

• Hispanic men also experienced their greatest gain at the associate degree level, where they recorded a 12 percent increase–the largest one-year increase of all groups at all levels. From 1996 to 1997, Hispanic men recorded increases of 4.1 percent in the number of bachelor's degrees earned and 4.8 percent in the number of master's degrees earned, while they experienced virtually no change in the number of first-professional degrees earned.

• Despite progress in the number of degrees earned, Hispanics remain underrepresented compared to their college enrollments. They earned 7.6 percent of associate degrees, 5.3 percent of bachelor's degrees, 3.7 percent of master's degrees, and 4.6 percent of first-professional degrees in 1997 but represented 9 percent of undergraduate students, 4.5 percent of graduate students, and 4.7 percent of professional students that same year.

Figure 18

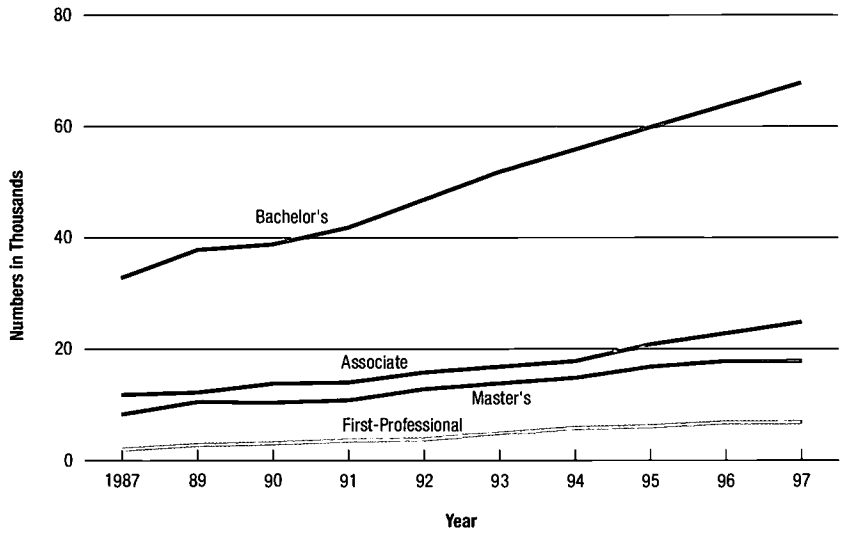
Degrees Awarded to Hispanic Americans, by Type of Degree: 1987 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999.

Figure 19

Degrees Awarded to Asian Americans, by Type of Degree: 1987 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999.

• From 1996 to 1997, Hispanic students attending Hispanic-serving institutions (HSIs)–colleges and universities with undergraduate enrollments that are at least 25 percent Hispanic–achieved degree gains at the associate and bachelor's levels but recorded losses at the master's and first-professional levels (Table 15). The number of Hispanics earning degrees at HSIs increased 13.1 percent at the associate degree level and 1 percent at the bachelor's degree level and decreased 4.2 percent at the master's degree level and 38.5 percent at the first-professional degree level in 1997.

• Overall, HSIs awarded 45.9 percent of all associate degrees earned by Hispanics in 1997, 22.9 percent of their bachelor's degrees, and 19.5 percent of their master's degrees. However, HSIs awarded only 4.4 percent of the first-professional degrees Hispanics earned that year.

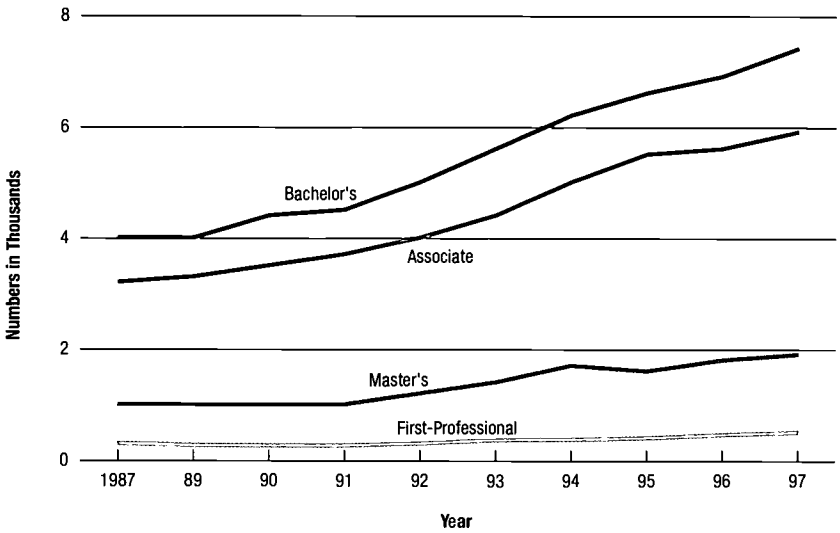
Asian Americans

• The number of Asian Americans who received bachelor's degrees more than doubled from 1987 to 1997 (Figure 19).

• Asian Americans achieved growth in all degree categories from 1996 to 1997, ranging from a 1.7 percent increase in the number of master's degrees earned to a 7.5 percent increase in the number of associate degrees earned (Tables 10 and 12). At the bachelor's and first-professional levels, Asian Americans recorded 5.6 percent and 6.3 percent increases, respectively (Tables 11 and 13).

Figure 20

Degrees Awarded to American Indians, by Type of Degree: 1987 to 1997



Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999.

• In 1997, Asian-American women recorded more progress than Asian-American men in the number of degrees they received in all categories except first-professional degrees. Asian-American women earned 9.2 percent more master's degrees while Asian-American men earned 5.3 percent fewer (Table 12). Similarly, Asian-American women earned 9.1 percent more associate degrees, more than the 5.5 percent increase in the number earned by Asian-American men (Table 10). However, Asian-American men slightly outgained their female counterparts in the number of first-professional degrees earned: 7.5 percent more for Asian-American men compared with 5 percent more for Asian-American women (Table 13).

• The number of Asian-American women earning associate and bachelor's degrees has more than doubled since 1987 (Tables 10 and 11), the number earning master's degrees has nearly tripled (Table 12), and the number receiving first-professional degrees has nearly quadrupled (Table 13). This tremendous growth in the number of degrees being earned by Asian-American women reverses a trend during the early 1980s when Asian-American men outpaced Asian-American women in their degree acquisition.

• In 1997, Asian Americans accounted for 11 percent of professional students and earned 9 percent of all first-professional degrees. They accounted for 6 percent of undergraduate students and

earned 5.8 percent of the bachelor's degrees and 4.4 percent of the associate degrees awarded. At the graduate level, Asian Americans represented 4.7 percent of all students and earned approximately the same proportion of master's degrees.

American Indians

• Despite progress at every degree level from 1987 to 1997 (Figure 20), American Indians continued to earn 1 percent or less of degrees conferred at all major levels.

• Although American Indians earned only a tiny fraction of the first-professional degrees awarded nationwide in 1997 (511 degrees), they experienced the largest increase (10.4 percent) over the previous year of all racial and ethnic groups at this level (Table 13).

• In 1997, American Indians earned 6.7 percent more associate degrees than in 1996, 6.3 percent more

WILLIAMS COLLEGE/PHOTO: A. BLAKE GARDNER

bachelor's degrees, and 8.2 percent more master's degrees (Tables 10, 11, and 12). These gains resulted from uneven progress by American Indian women and men at each of the different degree levels.

• From 1996 to 1997, American Indian women posted larger rates of increase than American Indian men at the associate, bachelor's, and master's degree levels; American Indian men made larger gains than American Indian women in the number of first-professional degrees earned.

• Although the actual numbers remain small, American Indian women earned 11.3 percent more master's degrees in 1997 than in 1996, compared with 3.6 percent more earned by American Indian men (Table 12). Similarly, with 8.2 percent more bachelor's degrees awarded to American Indian women compared to 3.2 percent more awarded to American Indian men, women led their male counterparts in the rate of increase at the bachelor's degree level (Table 11). However, American Indian men earned 12.9 percent more first-professional degrees in 1997 than in 1996, while American Indian women earned only 7.2 percent more (Table 13). □

Degrees Conferred by Field

As a group, students of color made progress from 1996 to 1997 in all six major fields of study at the bachelor's degree level and mixed progress at the master's degree level. At the bachelor's level, the largest percentage gain–7.8 percent–occurred in the number of life sciences degrees earned, followed by a 7.7 percent increase in the number of health professions degrees earned (Table 16). Students of color also realized moderate gains in the number of bachelor's degrees earned in education and social sciences from 1996 to 1997.

Minority students earned only slightly more (1.7 percent) business degrees at the bachelor's degree level, which reflects slowing degree attainment for students of color in this field, where they posted rapid degree gains in the late 1980s and early 1990s. The 0.7 percent increase in the number of engineering degrees earned was the smallest gain by students of color at the bachelor's level.

At the master's level, students of color experienced the largest increase (9.8 percent) in the number of degrees earned in education (Table 17). But students of color earned fewer master's degrees in engineering (-8.4 percent), while they experienced no increase in the number of health professions degrees earned at this level. However, from 1987 to 1997, the number of minority men earning degrees in health professions more than tripled at the master's level and nearly doubled at the baccalaureate level.

TEXAS STATE TECHNICAL COLLEGE

The 8.4 percent decrease in the number of engineering degrees earned was the only decline experienced by students of color at the master's level. Both minority men and women experienced declines in the number of engineering master's degrees earned from 1996 to 1997 (9.3 percent and 5.5 percent, respectively). These trends reflect a continued slowing in the number of

engineering degrees being earned by students of color.

African Americans

• Despite increases from 1996 to 1997 in other categories, African Americans earned 0.9 percent fewer bachelor's degrees in business, the field in which African Americans have received the largest number of degrees since the early 1980s (Table 16). The main reason for this stagnation was a 1.5 percent decrease in the number of degrees awarded to African-American women. In addition, African-American men earned no more business degrees in 1997 than they had in 1996. Overall, the total number of bachelor's degrees awarded in business decreased slightly (-0.2 percent) from 1996 to 1997, reflecting a continued trend in this field; since 1987, the total number of bachelor's degrees awarded in business has decreased by 6 percent.

• Social sciences, the second most popular field of study for African Americans at the bachelor's level, showed a 2.9 percent increase in the number of degrees awarded from 1996 to 1997. African Americans made larger percentage gains in education, health professions, life sciences, and engineering. African Americans made varied progress in degree awards in all four of these fields during the most recent ten years for which data are available.

• At the bachelor's level, African Americans earned 8.6 percent more life sciences degrees in 1997 than in 1996, the largest percentage gain in this field among all racial and ethnic groups. African-American women accounted for the largest percentage increase–10 percent–compared with African-American men, who earned 5.8 percent more life sciences degrees that year.

• African-American women also made greater progress than African-American men in the number of education, social sciences, and health professions degrees earned at the bachelor's level. However, African-American men had larger increases in engineering–4 percent more degrees earned by men versus 0.8 percent more earned by women.

• Led by a 12.5 percent increase in the number of education degrees earned, the number of master's degrees earned by African Americans increased from 1996 to 1997 in every major field (Table 17). Because of a 0.6 percent decrease in the number of engineering master's degrees earned by African-American men, African Americans as a group experienced the least progress in degrees earned at the master's level in engineering (1.8 percent more in 1997 than in 1996).

• In 1997, African Americans recorded increases in the number of master's degrees earned of 10.5 percent in business, 7.7 percent in public affairs, 6.8 percent in the health professions, 4.7 percent in the social sciences, and 1.8 percent in engineering.

• African-American women earned 14 percent more education degrees and 13 percent more business degrees at the master's level in 1997, compared with 7.8 percent more education degrees and 7.6 percent more business degrees earned by African-American men at this level.

Hispanics

• Hispanics achieved gains in five of the six major fields at both the bachelor's and master's degree levels from 1996 to 1997. The largest gains were a 9.6 percent increase in the number of education degrees and an 8.5 percent increase in the number of life sciences degrees at the bachelor's level (Table 16). With small decreases of 2 percent in the number of bachelor's degrees earned and 0.9 percent in the number of master's degrees earned, Hispanics lost ground in the number of engineering degrees earned at both levels.

• At the bachelor's level, Hispanic men showed progress from 1996 to 1997 in all major degree fields except engineering (Table 16). Hispanic men showed the greatest progress in the number of education degrees they received: they outgained Hispanic women, earning 11.9 percent more degrees than in 1996, compared with an 8.9 percent increase by Hispanic women. Hispanic men also made moderate to small gains in the health professions (6.5 percent more degrees earned), social sciences (2.7 percent more degrees earned), and business and life sciences (2.4 percent more degrees earned). Business continues to be the most popular field among Hispanics at the bachelor's level.

• Education remains the most popular master's field of choice for Hispanics (Table 17). Overall, Hispanics earned 6 percent more master's degrees in education in 1997 than they had in 1996. Hispanic women earned 8.2 percent more and Hispanic men earned 5.3 percent more.

THE RICHARD STOCKTON COLLEGE OF NEW JERSEY

• Compared to other racial and ethnic groups, Hispanic women experienced the largest increase–13.4 percent–in the number of business degrees earned at the master's level. In 1997, Hispanic men showed their largest gain (11.4 percent more degrees earned) in the social sciences.

• In 1997, Hispanic women earned 5.3 percent fewer engineering degrees at the master's level than they had in 1996. More than twice as many Hispanic women earned engineering master's degrees in 1997 than had in 1987, but they still account for a very small percentage of master's degrees awarded to Hispanic students.

Asian Americans

• At the bachelor's level, the most popular degree fields in 1997 for Asian Americans were business, life sciences, and engineering (Table 16). However, from 1996 to 1997, Asian Americans achieved the largest percentage increase (12.7 percent) in the number of health professions degrees earned. Asian-American men and women contributed to this, with increases of 16 percent and 11.6 percent, respectively. Conversely, Asian Americans reported a negligible percentage gain (0.5 percent) in the number of engineering bachelor's degrees earned, with Asian-American women earning 1.6 percent more degrees than in 1996 and Asian-American men earning virtually the same number as in 1996.

• Asian Americans recorded their second highest gain–7.9 percent–in the number of education degrees earned at the bachelor's level from 1996 to 1997. Asian-American men also achieved larger percentage increases than Asian-American women in the number of education bachelor's degrees they received in 1997: 14.7 percent and 5.4 percent more, respectively.

• At the master's degree level, Asian Americans received the largest number of degrees in business, followed by engineering and education (Table 17).

• From 1996 to 1997, Asian Americans experienced the largest percentage increase at the master's level in the number of social sciences degrees earned (14.9 percent) and the largest decrease in the number of engineering degrees earned (-11.1 percent) among the four ethnic groups. The 14.9 percent increase in social sciences degrees was due entirely to a 31 percent increase in the number earned by Asian-American women.

• At the bachelor's degree level, Asian-American men also exhibited larger percentage gains than women in the social sciences, business, and the health professions (Table 16). However, at the master's degree level, with Asian-American men recording decreases in the number of degrees earned in all six major fields, women consistently outgained men.

• The popularity of public affairs as a field of concentration for Asian-American women at the master's level continued to grow. In 1997, 15.4 percent more Asian-American women and 6.6 percent fewer Asian-American men earned master's degrees in public affairs than had in 1996.

American Indians

• Similar to other ethnic minority groups, American Indians' three most popular fields of study at the bachelor's level in 1997 were business, education, and the social sciences (Table 16).

• From 1996 to 1997, American Indians registered increases in the number of bachelor's degrees earned in all major fields, led by an 8.1 percent increase in social sciences, followed by a 6.8 percent increase in biological/life sciences and a 6.3 percent increase in health professions.

• At the bachelor's level, American Indian women posted larger percentage increases in the number of degrees earned than American Indian men in education, business, the social sciences, and engineering. However, American Indian men posted larger percentage increases than American Indian women in the numbers of health professions and life sciences degrees earned.

• In 1997, American Indians earned the most master's degrees in education, followed by business and public affairs (Table 17).

• In 1997, American Indians earned 18.8 percent fewer social sciences master's degrees than they had in 1996. With 37.5 percent fewer earned by American Indian women and 9.4 percent more earned by American Indian men, it was the decrease in degrees earned by women that accounted for the overall decline.

• The 1997 master's degree data showed significant variation according to gender, in part because of the small numbers involved. For example, the percentage increase for American Indian men earning public affairs master's degrees was greater than that for American Indian women (26.5 percent and 14.7 percent, respectively), though only 13 more degrees were earned by American Indian men, compared to 17 more earned by American Indian women.

• In 1997, only seven American Indian women earned master's degrees in engineering; 82 American Indian women earned bachelor's degrees in engineering, up 20.6 percent from 1996.

DOCTORAL DEGREES

General Trends

The number of doctoral degrees earned by students of color increased 8.4 percent from 1996 to 1997, continuing a period of moderate growth in doctorates awarded to minorities that began in the late 1980s (Table 18). Overall, students of color achieved gains of 88 percent in the number of doctoral degrees earned during the most recent ten-year period for which data are available.

The total number of doctorates awarded increased by only 0.7 percent between 1996 and 1997. Women continued to make more progress than men. The number of women earning doctoral degrees was up 2.2 percent from 1996 to 1997, while the number of men earning such degrees decreased 1.1 percent. Since 1987, the number of doctoral degrees earned by women increased 51.5 percent, compared with a 19.4 percent increase in the number earned by men. However, men still earned the majority of doctoral degrees–nearly 59 percent in 1997.

The steady increase in the number of doctoral degrees earned by women is most evident among U.S. citizens. U.S. male citizens earned only 9.1 percent more doctorates in 1997 than in 1987, primarily because of slow rates of increase by white men. In comparison, women earned 36.6 percent more doctorates in 1997 than in 1987. However, U.S. women earned 1.4 percent fewer doctoral degrees in 1997 than in 1996, while men earned just under 1 percent more.

For the first time in the 1990s, non-U.S. citizens experienced a one-year decrease in the number of doctoral degrees earned. The 14.8 percent decrease followed a period of steady increase; yet even with the one-year decline, non-U.S. citizens showed a 58.4 percent increase in the number of doctoral degrees earned between 1987 and 1997. The number of non-U.S. citizen men earning doctoral degrees decreased 16.1 percent from 1996 to 1997, while the number of non-U.S. citizen women earning such degrees decreased 11.3 percent.

African Americans

• The number of African Americans earning doctoral degrees increased slightly (1.5 percent) in 1997 (Table 18). However, because of the small numbers of African-American students earning degrees at this level, the increase translated into a numerical gain of only 28 doctorates. Nevertheless, with a 23.2 percent increase in the number of doctorates earned from 1987 to 1997, African Americans continued an upward trend in this category.

• African-American men registered their first decrease in three years in the number of doctoral degrees earned. The number of men earning doctoral degrees decreased by 1.5 percent from 1996 to 1997 (Figure 21).

• The number of African-American women earning doctoral degrees increased in 1997, following a one-year decline from 1995 to 1996. In 1997, 3.6 percent more African-American women earned doctoral degrees than had in 1996.

• The number of doctoral degrees awarded by historically black colleges and universities to African Americans decreased 6.6 percent, from 166 degrees in 1996 to 155 degrees in 1997 (Table 14). Despite this one-year decrease, HBCUs awarded 8.6 percent of all doctoral degrees earned by African Americans in 1997.

Hispanics

• The 8.2 percent increase in the number of doctorates earned by Hispanics in 1997 was consistent with recent trends in doctoral degree awards among this group. Hispanics earned 66.6 percent more doctorates in 1997 than in 1987. In 1997, for the first time ever, more than 1,000 Hispanics were awarded doctoral degrees.

• For the third consecutive year, Hispanic men earned more doctoral degrees than Hispanic women. Nearly 9 percent more Hispanic men earned doctoral degrees in 1997 than in 1996, compared to 7.6 percent more Hispanic women.

• The number of doctoral degrees earned by Hispanics at Hispanic-serving institutions decreased 17.7 percent, from 79 degree awards in 1996 to 65 in 1997 (Table 15). Nevertheless, Hispanic-serving institutions awarded 6.1 percent of all doctorates awarded to Hispanics in 1997.

Asian Americans

• After an unexpected one-year decrease, the number of doctorates earned by Asian Americans increased 21.8 percent from 1996 to 1997 (Table 18). Overall, the number of Asian Americans earning doctorates more than doubled from 1987 to 1997.

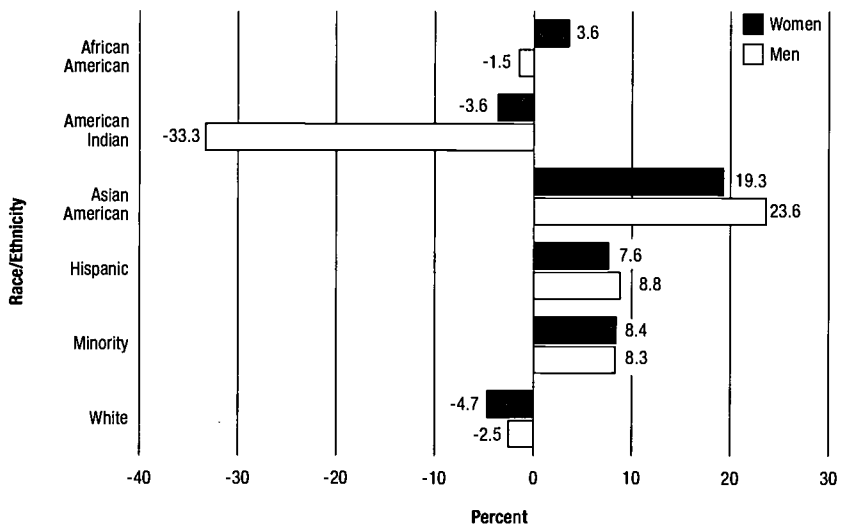
• Asian-American men experienced a greater gain than Asian-American women in the number of doctoral degrees earned in 1997, but both groups showed progress. The number of men earning doctorates increased 23.6 percent, while the number of women earning such degrees increased 19.3 percent.

American Indians

• American Indians earned 19.9 percent fewer doctoral degrees in

Figure 21

Changes in Numbers of Doctoral Degrees, by Race, Ethnicity, and Gender: 1996 to 1997



Source: National Research Council, Doctorate Records File, 1996 to 1997.

1997 than in 1996, with men accounting for most of the decrease (Table 18). Men earned 33.3 percent fewer doctorates in 1997, compared with 3.6 percent fewer earned by women. The overall decline wiped out substantial gains American Indians had achieved in 1996.

• American Indians earned only 149 doctoral degrees in 1997, less than half of 1 percent of all doctoral degrees awarded that year.

DOCTORAL DEGREES BY FIELD

U.S. citizens registered only modest gains in four major fields of doctoral study in 1997, while they experienced declines in three major fields. The largest increase, 4.1 percent, was in the humanities, though engineering (3.5 percent), physical sciences (3.3 percent), and life sciences (1.6 percent) also were up slightly from the previous year (Table 19). The number of education and social sciences degrees, as well as those in other professional fields, decreased by 8.5 percent, 3.4 percent, and 5.3 percent, respectively.

African Americans

• In 1997, African Americans gained ground in all major doctoral fields except physical sciences and education. In physical sciences, African Americans were the only ethnic minority group to experience a decline for the year.

• African Americans achieved the greatest progress–39 percent–in engineering, though their numbers remained small. Even with the increase, only 82 African Americans earned engineering doctorates in 1997. More African Americans earned doctoral degrees in life sciences and humanities, where the numbers of doctorates earned increased by 16.3 percent and 13.4 percent, respectively.

Hispanics

• Hispanics recorded increases in 1997 in all major fields except engineering and social sciences. They also registered substantial gains ranging from 11.3 percent to 20.7 percent in life sciences, physical sciences, education, and humanities.

• An 18.6 percent increase in the number of education doctorates earned by Hispanics was the largest among the four ethnic minority groups.

Asian Americans

• In 1997, Asian Americans reversed one-year decreases in the numbers of social sciences and physical sciences doctorates earned, recording increases of 43.3 percent and 41.5 percent, respectively. These gains were the largest by far among the four ethnic minority groups.

• Asian Americans achieved increases in all six major doctoral degree fields in 1997, the only ethnic group to demonstrate such progress.

American Indians

• Despite gains in 1996, American Indians did not achieve increases in any of the major doctoral degree categories in 1997.

• American Indians earned only 13 doctoral degrees in physical sciences and 12 in engineering in 1997. Education again was the most popular choice among American Indians, with 48 doctoral degrees earned. However, that number was down 20 percent from the 60 education doctorates American Indians earned in 1996. ■

SPECIAL FOCUS

The Benefits of Racial and Ethnic Diversity in Higher Education

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"Many colleges and universities share a common belief, born of experience, that diversity in their student bodies, faculties, and staff is important for them to fulfill their primary mission: providing a quality education. The public is entitled to know why these institutions believe so strongly that racial and ethnic diversity should be one factor among the many considered in admissions and hiring. The reasons include:

- **It enriches the educational experience.** We learn from those whose experiences, beliefs, and perspectives are different from our own, and these lessons can be taught best in a richly diverse intellectual and social environment.
- **It promotes personal growth—and a healthy society.** Diversity challenges stereotyped preconceptions; it encourages critical thinking; and it helps students learn to communicate effectively with people of varied backgrounds.
- **It strengthens communities and the workplace.** Education within a diverse setting prepares students to become good citizens in an increasingly complex, pluralistic society; it fosters mutual respect and teamwork; and it helps build communities whose members are judged by the quality of their character and their contributions.
- **It enhances America's economic competitiveness.** Sustaining the nation's prosperity in the 21st century will require us to make effective use of the talents and abilities of all our citizens, in work settings that bring together individuals from diverse backgrounds and cultures" *(Chronicle of Higher Education,* 13 February 1998, p. A48). [1]

Much of the analysis of literature that is discussed in this report was done as part of a manuscript commissioned by the American Educational Research Association's Panel on Racial Dynamics in Colleges and Universities. The results of the panel's work will appear in a book, *Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education,* which will be published by Stanford University Press. Information about the work of the panel is available on Professor Hakuta's web page: http://www.stanford.edu/~hakuta/RaceInHigherEducation.html.

The preceding statement affirms a belief of higher education administrators, academics, and national education associations that racial and ethnic diversity expands and enriches teaching and learning in colleges and universities. Moreover, the ability to enroll a diverse student body and to hire a diverse faculty and staff are essential to the mission of colleges and universities across the nation. Affirmation of the value of diversity is also evident in a statement endorsed by the presidents of 62 research universities (including eight Ivy League institutions and more than 30 public research universities):

> We speak first and foremost as educators. We believe that our students benefit significantly from education that takes place within a diverse setting. In the course of their university education, our students encounter and learn from others who have backgrounds and characteristics very different from their own. As we seek to prepare students for life in the 21st century, the educational value of such encounters will become more important, not less, than in the past.
>
> A very substantial portion of our curriculum is enhanced by the discourse made possible by the heterogeneous backgrounds of our students. Equally, a significant part of education in our institutions takes place outside the classroom, in extracurricular activities where students learn how to work together, as well as to compete; how to exercise leadership, as well as to build consensus. If our institutional capacity to bring together a genuinely diverse group of students is removed–or severely reduced–then the quality and texture of the education we provide will be significantly diminished (Association of American Universities, "On the Importance of Diversity in University Admissions," *The New York Times,* 24 April 1997, p. A27).

Challenges to Diversity

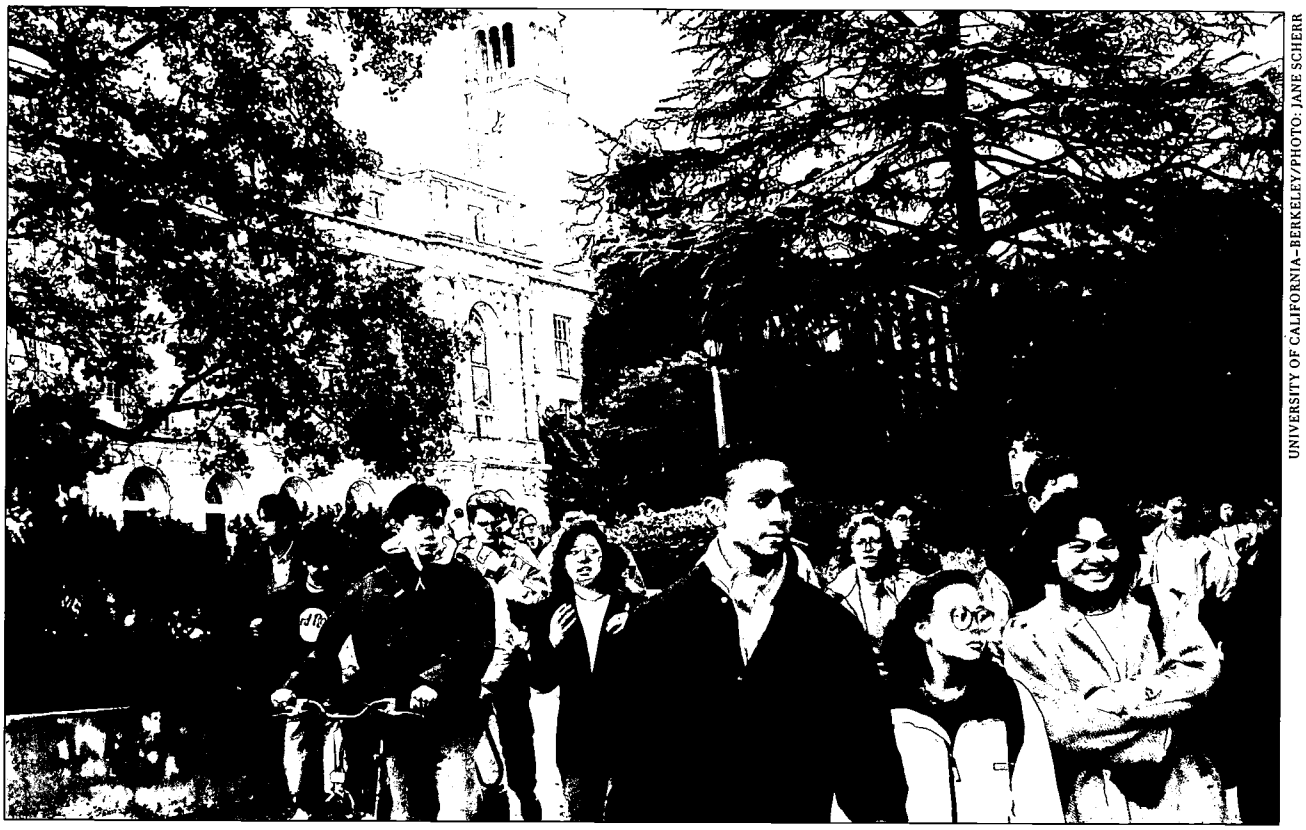
Even as recognition of the critical role that diversity plays in teaching and learning in colleges and universities grows, more and more constraints are being placed on campus leaders' ability to make decisions that ensure that racial and ethnic diversity is a part of their institutions. This is apparent in the challenges to the use of race as one factor in college admissions, employment, and financial aid decisions that currently are being levied in the courts and in California and Washington ballot initiatives that prohibit affirmative action. Momentum for ending race-sensitive policies is growing in several states–including Florida, where Governor Jeb Bush recently issued an order to public higher education institutions to discontinue admissions policies that use race as a factor in admissions decisions. Given the lawsuits pending against the University of Michigan and the University of Washington, it is becoming apparent that decisions about campus diversity increasingly will be made in courtrooms or governors' offices rather than in classrooms or boardrooms.

The legal domain is not the only one in which we must establish how diversity enriches our individual and collective experiences. The public frequently questions the value of diversity in higher education. While it usually is not difficult to get Americans to express support for such democratic ideals as fairness, equity, and equality of opportunity, the affirmative action debate has been convoluted by public figures who assert that the policy violates the very democratic principles that supported its creation.

Affirmative action programs grew out of democratic principles concerning equity and social justice. They were designed to undo the damage that had been done by discrimination in our society. Today, opponents of affirmative action criticize it for being inequitable and discriminatory, thus reinforcing a number of myths about racial dynamics in higher education. In the forthcoming book *Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education,* Chang, Witt-Sandis, Jones, and Hakuta (in press) discuss common misconceptions about racial diversity in higher education that distort the debate over affirmative action.[2]

> In the broader society, these misconceptions create powerful attitudinal barriers to embracing the benefits and fairness arguments of the diversity debate, and prevent acceptance of a more inclusive and accurate definition of merit. Despite their lack of substantiation, these popular misconceptions have formed the basis for policies that address racial dynamics in universities and in the broader society (Chang, Witt-Sandis, Jones, & Hakuta, in press, p. 2).

The first misconception held by many opponents of affirmative action is that "past inequalities in access and opportunities that racial and ethnic minority groups have suffered have been sufficiently



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addressed and no longer require attention" (Chang, Witt-Sandis, Jones, & Hakuta, in press, p. 3). William Trent and associates (in press) refute this myth by clearly documenting and discussing the impact of past and persisting inequities in access and educational opportunities for low-income and minority children in the United States.

A second misconception, that "merit can be defined by test scores" (Chang, Witt-Sandis, Jones, & Hakuta, in press, p. 4), is addressed by Linda Wightman (in press). Her chapter serves as a primer on the ways in which standardized tests should (and should not) be used in making admissions decisions in higher education. The misuse of these tests has "had a systematic adverse impact on minority applicants to higher education" (Chang, Witt-Sandis, Jones, & Hakuta, in press, p. 4). Moreover, Wightman's work shows that students of color "who would have been denied admission (if decisions were based solely on numerical indicators) succeeded when they were given an opportunity to participate" (Chang, Witt-Sandis, Jones, & Hakuta, in press, p. 4).

A third misconception, that "fairness is best achieved through race-neutral policy" (Chang, Witt-Sandis, Jones, & Hakuta, in press, p. 4), is addressed by Shana Levin (in press), whose analysis indicates "that racism (whether intended or not) exists and has always existed in this country on an individual, institutional, and societal level" (Chang, Witt-Sandis, Jones, & Hakuta, in press, p. 5). Through her synthesis of the literature and research in social psychology, Levin argues that a "colorblind" approach will not improve conditions in our society; in fact, it is most likely to preserve the racial status quo.

The final misconception, that "diversity programs benefit only students of color" (Chang, Witt-Sandis, Jones, & Hakuta, in press, p. 5), is addressed in a chapter by Jeffrey F. Milem (in press). Evidence in this chapter supports Justice Powell's ruling in the *Bakke* case that the use of race as one of many factors in college admissions decisions is legal because it serves a compelling educational goal for higher education institutions. Specifically, Milem discusses research and literature from a variety of disciplines that illustrate the ways in which racial and ethnic diversity benefits individuals, institutions, and society.

A recent study by William Bowen and Derek Bok (1998) of black and white students at institutions with selective admissions poli-

cies presents compelling evidence that challenges another myth about affirmative action in college admissions. Many opponents of affirmative action programs assert that students of color who are admitted through such programs either are less qualified than other students who are not admitted or are simply unqualified for study at these institutions. Yet Bowen and Bok found that black students who were likely to have been admitted through affirmative action exhibited high levels of success across a variety of outcomes.

UNIVERSITY OF GEORGIA

Black students who attended selective institutions "had strong academic credentials when they entered college, . . . graduated in large numbers, and . . . have done very well after leaving college" (Bowen & Bok, 1998, p. 256). Nearly 75 percent of the black undergraduates who enrolled at the institutions in Bowen and Bok's sample graduated from college within six years, compared to approximately 87 percent of white students.[3] Also, the more selective the institution, the higher the black students' completion rate. These figures exceed by a wide margin the average graduation rates for blacks (40 percent) and for whites (59 percent) attending NCAA Division I institutions. Black graduate and professional students who attended selective institutions graduated from law, business, and medical schools at a rate of approximately 90 percent (Bowen & Bok, 1998).

Despite evidence of the educational value of diversity in higher education, myths about racial dynamics in higher education are prevalent, and challenges to affirmative action programs and policies are growing. The press has chosen to focus its reporting on the political controversy surrounding affirmative action rather than on the academic research that documents the value of racial/ethnic diversity in colleges and universities. As a result, opponents of affirmative action have been more effective than proponents at getting their views covered in the popular media.

Challenges to the use of race in college admissions in law courts and in the court of public opinion require that we document the benefits of diversity and provide evidence of persistent discrimination and inequality in higher education. An expanding body of research establishes the value of diversity in higher education and is highlighted in this section of the status report. But the work must be complemented by campus-level studies of diversity outcomes. This will enable the higher education community to make the case for the fundamental role of diversity in enhancing teaching and learning on college and university campuses.

Conceptualizing Diversity

Before discussing the ways in which racial and ethnic diversity benefits higher education, it is important to define diversity. Building upon the work of Gurin (1999) and Chang (1999a), we assert that three types of diversity have an impact on student outcomes. The first, *structural diversity,* refers to the numerical and proportional representation of students from different racial/ethnic groups in the student body (Hurtado, Milem, Clayton-Pedersen, & Allen, 1998, 1999). A second type of diversity involves *diversity-related initiatives* (i.e., cultural awareness workshops, ethnic studies courses, etc.) that occur on college and university campuses. While demographic shifts or changes in the structural diversity of campuses frequently provide the stimulus for diversity-related initiatives (Chang, 1999b), some colleges and universities incorporate these types of initiatives even though

their campuses are racially and ethnically homogeneous. The final type of diversity, *diverse interactions,* is characterized by students' exchanges with racially and ethnically diverse people as well as diverse ideas, information, and experiences.

These three types of diversity are not mutually exclusive. In fact, we are most frequently exposed to diverse information and ideas through our interactions with diverse people. Moreover, while diversity-related initiatives benefit students who are exposed to them–even on campuses that are almost exclusively white–their impact on students is much more powerful on campuses that have greater structural diversity (Chang, 1999c). In sum, while each type of diversity can confer significant positive effects on educational outcomes, the impact is extended by the presence of the other types of diversity (Chang, 1999b; Gurin, 1999; Hurtado, Milem, Clayton-Pedersen, & Allen, 1998, 1999).

Conceptual Framework for Understanding the Educational Benefits of Diversity

Through a multidisciplinary analysis of the research literature, we present information that expands our understanding of the benefits of diverse colleges and universities. In presenting these findings, we use a four-dimensional framework to describe and discuss the benefits of diverse college campuses. Research indicates that racial and ethnic diversity in higher education benefits (1) individual students, (2) higher education institutions,

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(3) the economy and private enterprise, and (4) society.

Individual benefits refer to the ways in which individual students' educational experiences and outcomes are enhanced by diversity on campus. *Institutional benefits* refer to the ways in which diversity enhances the ability of colleges and universities to achieve their missions–particularly teaching, research, and service. *Economic and private sector benefits* refer to the ways in which diversity enhances the economy and the functioning of organizations and businesses in the private sector. *Societal benefits* are defined as the ways in which diversity at colleges and universities affects lives, policies, and issues beyond the walls of the university–including the achievement of democratic ideals, the development of an educated and involved citizenry, and the ways in which underserved groups (e.g., low-income, elderly, those who lack sufficient health care) are able to receive the services they require.

BENEFITS OF DIVERSITY TO INDIVIDUAL STUDENTS

> [The] educational benefit [of diversity] is universal in that all students learn from it, not just minority students who might have received a "bump" in the admissions process. Indeed, majority students who have previously lacked significant direct exposure to minorities frequently have the most to gain from interaction with individuals of other races. The universality of this benefit distinguishes the diversity rationale from the rationale of remedying discrimination, under which minority students received special consideration to make up for past injustices to their racial group (Alger, 1997, pp. 21-22).

Gurin (1999) makes a persuasive argument regarding higher education's unique opportunity to enhance the cognitive and psychosocial development of college students. She argues that undergraduates are at a critical stage in their human growth and development in which diversity, broadly defined, can facilitate greater awareness of the learning process, better critical thinking skills, and better preparation for the many challenges they will face as involved citizens in an increasingly pluralistic and democratic society.

Erikson's work (1946, 1956, cited in Gurin, 1999) regarding psychosocial development indicates that individuals' social and personal identity is formed during late adolescence and early adulthood–the time when many attend college. Therefore, higher education environments facilitate the development of identity–for example, by offering the opportunity to be

exposed to people, experiences, and ideas that differ from those of one's past environment (Gurin, 1999). Moreover, the college environment can accentuate the normative influence of peer groups. Diversity and complexity in the college environment "encourage intellectual experimentation and recognition of varied future possibilities" (Gurin, 1999, p. 103). These conditions are critical to the successful development of identity.

Gurin uses the work of Piaget as a conceptual and theoretical rationale for how diversity facilitates students' cognitive development. Piaget (1971, 1975/1985, cited in Gurin, 1999) argues that cognitive growth is facilitated by disequilibrium, or periods of incongruity and dissonance. He also argues that for adolescents to develop the ability to understand and appreciate the perspectives and feelings of others, they must interact with diverse individuals in equal status situations. This facilitates the process of "perspective taking" and allows students to progress in intellectual and moral development. In order for "perspective taking" to occur, both diversity and equality must be present (Gurin, 1999).

While Piaget's work was done primarily with children and adolescents, the applicability of this work to the developmental processes of college students is well established in the work of William Perry (1970). Perry used an explicitly Piagetian model in his study of the cognitive development of college students at Harvard. Perry's theory outlines the intellectual and ethical development of college students. It is a nine-stage model that traces the development of students' thinking about the nature of knowledge, truth and values, and the meaning of life and responsibilities (King, 1978).

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Specifically, Perry's theory examines students' intellect (how they understand the world and the nature of knowledge) and their identity (how they find meaning for their place in the world) (King, 1978). Key to the successful progression of students through the developmental stages in this theory is the ability to recognize the existence of multiple viewpoints and "the indeterminacies" of "Truth" (Pascarella and Terenzini, 1991, p. 29). As students progress to the higher stages of development in the Perry schema, they develop commitments to beliefs, values, behaviors, and people. The process of developing these commitments is dynamic and changeable and is triggered by students' exposure to new experiences, new ideas, and new people. Perry (1981) suggests that this process of development is likely to extend throughout our lives.

A growing body of research in social psychology indicates that it is inappropriate to assume that active engagement in learning occurs as a matter of course during the college years (Gurin, 1999). In fact, what previously had been assumed to be active engagement in learning is actually a more automatic response, or "mindlessness" (Langer, 1978, cited in Gurin, 1999). This "mindlessness" is the result of learning that already has occurred and that has become so customary that thinking proves unnecessary.

In the absence of what Coser (1975, cited in Gurin, 1999) describes as complex social structures,4 people work from scripts or schemas that do not require active thinking processes. Coser asserts that people who interact with more complex social structures exhibit a heightened sense of individuality while simultaneously showing a more complex attentiveness to the social world. Racially and ethnically

diverse learning environments provide the types of complex social structures that stimulate the development of active thinking processes (Gurin, 1999).

Types of Individual Outcomes

In considering the outcomes of diversity for individuals, it is helpful to understand what is meant by *outcomes.* Gurin (1999) describes two major types of outcomes that are influenced by campus diversity. *Learning outcomes* refer to active learning processes in which students become involved while in college, the engagement and motivation that students exhibit, the learning and refinement of intellectual and academic skills, and the value students place on these skills after they leave college. *Democracy outcomes* refer to the ways in which higher education prepares students to become involved as active participants in a society that is becoming increasingly diverse and complex. (These outcomes and the research evidence pertaining to them are discussed in detail in the section of this report that considers the societal benefits of diversity.)

To the categories of outcomes described by Gurin (1999), Milem (in press) proposes two other types of outcomes. The first, *process outcomes,* reflect the ways in which students perceive that diversity has enriched their college experiences. Measures of student satisfaction and perceptions of campus climate are examples of outcomes included in this category. These measures can also be thought of as *intermediate outcomes* (Astin, 1991) because of the unique role they play in students' development. They also can be viewed as a source of influence on other types of outcomes. For example, student satisfaction can be studied as an outcome of the college experience as well as for possible influence on other important outcomes (such as persistence, achievement, etc.). Similarly, students' perceptions of the campus racial climate can be viewed as outcome measures. However, they are also important (as intermediate outcomes) when they are examined for the influence they have on other important student outcomes.

A final type of outcome reflects the *material benefits* students accrue when they attend diverse colleges. Examples of material benefits include increased salary/wages and the attainment of advanced graduate or professional degrees and/or better job placements for students educated at more diverse institutions and/or who receive affirmative action in college admissions.

Discussion of Research Findings of Diversity and Individual Outcomes

Students' learning outcomes are enhanced in a number of ways by exposure to diversity in college. Students who interact with diversity in college show greater relative gains in critical and active thinking. Pascarella, Whitt, Nora, Edison, Hagedorn, and Terenzini (1996) report that students who participated in racial and cultural awareness workshops showed measurable gains in their critical thinking skills at the end of their first year of college. In another study using these data, Pascarella, Edison, Nora, Hagedorn, and Terenzini (1996) studied changes in students' openness to diversity and challenge after their first year of college. After controlling for precollege characteristics (including levels of openness to diversity and challenge at the time that students first entered college), the authors found that students who perceived that their college was nondiscriminatory, had participated in racial and cultural awareness workshops, and had interacted with diverse peers were likely to report greater openness to diversity and challenge after their first year in college.

In an extension of this study, Whitt, Edison, Pascarella, Terenzini, and Nora (1998) examined factors that predicted openness to diversity and challenge after the second and third years of college. They found that, after controlling for the effect of individual student characteristics, perceptions of a nondiscriminatory racial environment at the college, participation in racial or cultural awareness workshops, having diverse student acquaintances, and engaging in conversations with other students in which diverse ways of thinking and understanding were emphasized predicted openness to diversity and challenge after the second and third years of college.

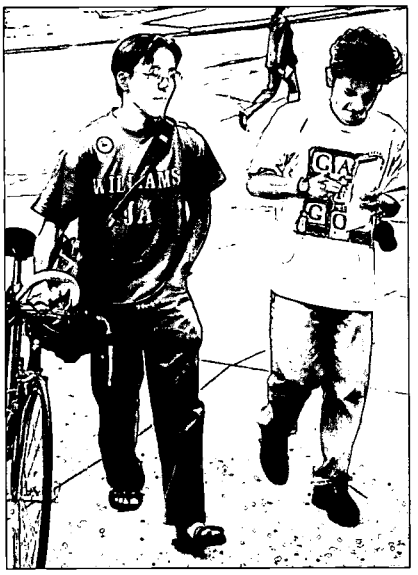
Research on the impact of a curriculum enhancement project in a sequence of human development courses adds to our understanding of the impact of exposure to diverse ideas and information. This study found that curricular and pedagogical interventions enhance students' openness to diversity and their critical thinking skills (MacPhee, Kreutzer, & Fritz, 1994). Mixed research methods (quantitative and qualitative) were employed to exam-

ine the impact of the curriculum transformation that occurred in these courses. The findings from the quantitative analyses suggested that student attitudes toward outgroups (particularly the poor) were broadly influenced by the transformation of the curriculum. They also found small but statistically significant changes in students' racial attitudes.

The qualitative analyses revealed three primary findings: First, students demonstrated that they had developed a number of critical thinking skills. Second, levels of ethnocentrism among students declined. Finally, students who had enrolled in these classes were able to make an appropriate distinction between poverty and ethnicity as developmental risk factors (MacPhee, Kreutzer, & Fritz, 1994).

Gurin (1999) provides additional evidence regarding the ways in which diversity enhances students' learning outcomes. Analyses were conducted on behalf of the University of Michigan for use as evidence in the two lawsuits that challenge the university's use of race as one factor in undergraduate and graduate/professional admissions decisions. The analyses use data gathered by the university, as well as longitudinal data from a national sample of undergraduates gathered by the Higher Education Research Institute at UCLA. These analyses were conducted to document the educational outcomes of diversity for students at the University of Michigan as well as for students across the nation.

Students who reported higher levels of contact with diverse ideas, information, and people were more likely to show growth in their "active thinking processes," which were represented by increases in measures of complex thinking and social/historical thinking (Gurin, 1999). In addition, students who had greater exposure to diversity were more likely to show higher levels of intellectual engagement and motivation. Further, students who had greater exposure to diversity were likely to report that they had higher postgraduate degree aspirations. The analyses also showed that exposure to various types of diversity had different relative impact based on students' racial/ethnic



WILLIAMS COLLEGE/PHOTO: MARK MITCHELL

background. While white students were more likely to benefit from exposure to diverse ideas, information, and peers, African-American students were more likely to benefit from interactions with diverse peers. Moreover, African-American students experienced positive learning outcomes when they were exposed to close friends of their own race. In other words, for African-American students to fully benefit from diversity, they must have contact with diverse peers as well as interaction with same-race peers (Gurin, 1999).

Springer, Palmer, Terenzini, Pascarella, and Nora (1996) found that greater interaction with diverse people and ideas decreased the gap in views of campus climate frequently found between students of color and white students. This suggests that greater interaction with diversity in college helps students develop the ability to understand and appreciate the perspective of groups other than their own. These outcomes are similar to the outcomes of active thinking and perspective taking that were used in the analyses done by Gurin (1999).

Socializing across race and discussing racial/ethnic issues while in college have a positive effect on the learning outcomes of retention, intellectual self-concept, and social self-concept (Chang, 1996). In addition, students' overall satisfaction with college is enhanced by interactions with diverse students and ideas. Chang found that maximizing cross-racial interaction and encouraging ongoing discussions about race are educational practices that benefit students. However, when the effects of increased structural diversity for students of color are considered apart from involvement in these activities, students of color are likely to report less overall satisfaction with their college experience (Chang, 1996). Thus, increasing *only* the structural diversity of an institution without considering the effect of such a change on other dimensions of the campus

racial climate is likely to be problematic. (The significance of this is discussed in greater detail later in this section of the status report).

Chang's study indicates that the greater the representation of racially diverse students at an institution, the greater the likelihood that students will be engaged in cross-racial experiences. In an extension of this research, Chang (1999c) found that structural diversity (as represented by the enrollment of students of color at an institution) was essential to cross-racial interaction. As an institution becomes more structurally diverse, students are more likely to have opportunities to socialize across racial groups and to discuss racial issues. As this interaction increases, the campus environment becomes more supportive of diversity-related practices, which in turn enhances students' learning and educational experiences.

With regard to the process outcomes of diversity, Astin (1993) found that faculty members' emphasis on diversity in their courses had positive effects on students' overall satisfaction with college. Villalpondo (1994) reported similar findings regarding the relationship between satisfaction and the extent to which faculty included racially/ethnically diverse materials in their courses. This finding was as true for white students as for students of color. Tanaka (1996, cited in Smith & Associates, 1997) found that a more supportive campus climate, as evidenced by campus efforts to create a multicultural environment and to include racial/ethnic material in the curriculum, had positive effects on students' sense of community and their overall satisfaction with college.

WILLIAMS COLLEGE/PHOTO: BOB KRIST

The importance of the relationship between campus climate and student outcomes is well documented (Hurtado, Milem, Clayton-Pedersen, & Allen, 1998, 1999). Particularly relevant to this discussion of process outcomes is the significant effect of student perceptions of campus climate on other outcomes. Students' perceptions of the campus climate for diversity are important because they are both a product of the environment and a potential determinant of future interactions and outcomes (Astin, 1968; Tierney, 1987).

A recent study of law students at Harvard University and University of Michigan provides additional information regarding the process outcomes of diversity–especially as they pertain to legal education (Orfield & Whitla, 1999). A survey conducted by the Gallup Organization was administered by telephone to 1,800 law students attending these two schools. Survey results indicate that law students believe that their interactions with diverse people and ideas while in law school enhance their learning and thinking in fundamental ways.

Specifically, the overwhelming majority of students (90 percent) indicated that their exposure to racial and ethnic diversity at law school had a positive impact on their educational experience. Moreover, the students reported that being in a racially diverse environment enabled them to engage in discussions with others that enhanced their learning. Nearly two-thirds of the students indicated that diversity improved in-class discussions. More than six in ten (62 percent) indicated that diversity improved their ability to work and to get along with others. Approximately eight in ten (78 percent of Harvard law students and 84 percent of Michigan law students) reported that discussions with students from different racial and ethnic backgrounds significantly affected their views of the U.S. criminal justice system. The majority of students also reported that their discussions with students from

different racial and ethnic backgrounds significantly influenced their views regarding civil rights and conditions in various social and economic institutions. In sum, students who attend two of the most highly selective law schools in the country indicate that diversity is an essential aspect of their legal education.

An emerging body of evidence documents the material benefits that accrue to students of color who attend selective colleges and universities, as well as to students who attend selective institutions that are racially diverse. Daniel, Black, and Smith (1997) examined the relationship between college quality and the wages of young men. Not surprisingly, the authors found that young men who attended higher-quality colleges earned higher wages. These "returns" were significantly higher for black than for white men. The study also found that both black and white men who attended selective colleges with more diverse student bodies had higher earnings (though the returns were somewhat higher for white than for black men).

In another study of the material benefits of diversity, Bowen and Bok (1998) reported that black students who attended selective institutions were five times as likely as all black students nationwide to earn advanced degrees (professional degrees or PhDs). Black men in the entering cohort of 1976 reported an average annual income of $82,000–twice the average earnings of black college graduates nationally. Black women graduates of selective institutions earned an average of $58,500 annually–80 percent more than black women graduates nationwide (Bowen & Bok, 1998).[5]

Faculty Views on the Importance of Racial and Ethnic Diversity in Higher Education

Apart from students, faculty members may be the campus constituency best positioned to assess the ways in which diversity enhances teaching and extends students' learning. Data from a recent national survey of college and university faculty conducted by the Higher Education Research Institute (HERI) at UCLA offer a vivid and informative picture of how faculty view racial/ethnic diversity in higher education. Approximately 55,000 faculty nationwide completed the survey. The faculty were drawn from all institutional types in the higher education system.[6] Three of the survey items are particularly helpful in determining how faculty value racial and ethnic diversity in higher education.

Faculty overwhelmingly believe that a diverse student body enhances all students' educational experience. More than 90 percent of the faculty surveyed agreed with the statement that "a racially/ethnically diverse student body enhances the educational experience of all students." Women were more likely than men to endorse this statement (95.4 percent of women agreed compared to 87.7 percent of men). Faculty support of diversity was evident across institutional type and ranged from a low of 86.1 percent at private, two-year institutions to a high of 93.3 percent at private four-year colleges.

As stated earlier, one misperception is that the use of race as a factor in admissions decisions leads to the enrollment of unqualified or underprepared students. Because faculty members are the institutional representatives primarily responsible for facilitating teaching and learning, they are uniquely positioned to address this misperception. Findings from the HERI faculty survey indicate that faculty convincingly refute this assertion. Only 28 percent of the faculty surveyed agreed that "promoting diversity leads to the admission of too many underprepared students." While one-third of male faculty agreed with this statement (33.6 percent), fewer than one in five female faculty did so (18.4 percent). Faculty at private two-year colleges were most likely to agree with the statement (37.9 percent), while faculty at private four-year colleges were least likely to agree (24.9 percent).

One cluster of survey items assessed the importance faculty place on specific items representing different goals of undergraduate education. One item asked faculty to indicate how important they felt it was for undergraduate education to "enhance students' knowledge of and appreciation for other racial/ethnic groups." Nearly 60 percent of faculty nationwide responded that this goal was either very important or essential. Faculty at private two-year institutions were most likely to indicate that this goal was very important or essential (69.7 percent), while more than half of the faculty at public universities (50.9 percent) reported that it was very important or essential.

When viewed together, these findings suggest that faculty members–those primarily responsible for the teaching and learning that occur in the classroom–believe that

racial and ethnic diversity is important to the teaching and learning missions of our higher education institutions.

Summary

Students' learning outcomes are enhanced in a number of ways by their interaction with diversity in college. Students who interact more with diversity in college show greater relative gains in critical and active thinking. They also are more likely to show evidence of greater intellectual engagement and academic motivation. Students who interact more with diversity show greater relative gains in intellectual and social self-concept. Finally, higher levels of interaction with diversity predict higher levels of retention and increases in degree aspirations. Black students who attend selective institutions are more likely than those who attend less selective institutions to pursue a graduate or professional degree after completing their bachelor's degree.

Research findings also suggest that process outcomes are enhanced by campus diversity. Students who interact with diverse people and ideas report higher levels of satisfaction with their collegiate experience. Moreover, students who interact with diversity are likely to report a greater sense of community while in college. More extensive interaction with diverse people and ideas also decreases the gap between minority students' and white students' views of campus climate. This suggests that greater interaction with diversity in college helps students develop the ability to understand and appreciate the perspective of groups other than their own.

Finally, data from a recent national survey of college and university faculty offer important information regarding faculty views of the relationship between campus diversity and teaching and learning. The data suggest that faculty believe that racial and ethnic diversity enhances the teaching and learning that occur on their campuses. The many findings summarized in this section provide compelling evidence that diversity benefits individuals in a variety of important ways.

IMPACT OF DIVERSITY ON HIGHER EDUCATION INSTITUTIONS AND THEIR MISSIONS

Racial and ethnic diversity influences not only student outcomes, but also the very campuses where it exists. Emerging literature regarding the institutional benefits of diversity indicates that increased diversity has a transformative effect on colleges and universities (Chang, 1999b; Hurtado, Milem, Clayton-Pedersen, & Allen, 1998, 1999; Smith, 1995; Smith & Associates, 1997). This transformation enriches the educational environment on campus. An emerging body of literature reveals the ways in which faculty diversity transforms and enriches colleges' and universities' educational mission.

Diversity as a Transformational Force in Colleges and Universities

Actualizing the value-added educational benefits associated with diversity requires active engagement in institutional transformation (Chang, 1999b; Smith, 1995; Smith & Associates, 1997).

When diversity is conceptualized and engaged as a transformative enterprise effecting change in multiple levels of the campus environment, colleges and universities maximize a broad spectrum of learning outcomes which, for the most part, cannot be achieved without racial diversity (Chang, 1999b).

The transformation that occurs as institutions become more diverse "goes to the heart of the educational enterprise in terms of what is to be taught, who is to teach it, and how it is to be taught" (Garcia & Smith, 1996). Those who view diversity as part of a transformative process hold the core belief that higher education should be held accountable to basic democratic ideals that require it to be more equitable and inclusive. Diversity initiatives are transformational in nature because they challenge "traditional assumptions about learning, but also other forms of privilege associated with learning" (Chang, 1999b).

The transformational nature of diversity is evidenced by the way in which scholarship in ethnic studies and women's studies has changed the nature of what is studied, how it is studied, and how excellence is defined in particular disciplines (Garcia & Smith, 1996; Palmer, 1987). Chang argues that the transformative nature of diversity should be borne in mind when considering empirical evidence on diversity outcomes. "This is particularly important because widespread educational benefits associated with racial diversity emerge . . . out of institutional transformation and not out of preexisting institutional functions and practices" (Chang, 1999b).

How Faculty Diversity Enhances Teaching and Learning

Certain evidence also helps clarify the ways in which a more diverse faculty affects teaching and learning at colleges and universities. In a recent study of the impact of diverse faculty on the research, teaching, and service missions of the university, Milem (1999b) found that women faculty and faculty of color contributed to the diverse missions of the university in ways not typical of white male faculty members. This study analyzed the relationship between the race/ethnicity and gender of faculty members and a variety of outcomes related to the three central missions (teaching, research, and service) of higher education institutions.

After controlling for all other factors known to influence faculty job performance, study findings support the assertion that including women and people of color as faculty members enriches the three primary missions of the university. Race and gender are significant predictors of classroom use of active learning methods–methods that have been shown to positively influence the learning process. The use of active pedagogy provides students with an opportunity to interact with peers from different backgrounds through class discussions, collaborative learning methods, and group projects. Research suggests that these activities contribute to a campus climate more supportive of diversity and lead to positive outcomes for the students involved (see, for example, Astin, 1993; Chang, 1999c; Gurin, 1999; Hurtado, Milem, Clayton-Pedersen, & Allen, 1998, 1999; Smith & Associates, 1997).

A diverse faculty provides students with a greater opportunity to encounter readings and research that address the experiences of women and members of different racial/ethnic groups (Milem, 1999). This is another form of "interaction"–interaction with diverse ideas–that can lead to positive student outcomes. The engagement of diversity through readings and class materials provides students of color with opportunities to see themselves and their experiences represented in the curriculum. Interacting with diverse course content provides all students with opportunities to understand the experiences of individuals and groups who differ from them in various ways.

With regard to the research mission of the university, faculty of color and women faculty expand the boundaries of current knowledge through the research they produce. They are much more likely than white male faculty to engage in research that extends knowledge of issues pertaining to race/ethnicity and women/gender in society (Milem, 1999). Study findings suggest that faculty of color and women engage in service-related activities with greater frequency than their white male colleagues (Milem, 1999). Thus, students who attend institutions with higher proportions of women faculty and faculty of color are more likely to be exposed to faculty who are student-centered in terms of their orientation to teaching and learning. They also are more likely to experience a curriculum that is more inclusive in its representation of the experiences and contributions of women and racial/ethnic minorities in society. Finally, they are more likely to interact with faculty who are engaged in research on issues of race and gender. On the basis of these analyses, Milem (1999) argues that through their unique contributions to the mission of higher education, women faculty and faculty of color play a specialized and fundamental role in the teaching and learning process.

The Importance of Institutional Context and Climate

> Probably few areas of higher education and campus life in the recent past have had more attention paid to the policy dimension than has the issue of race on campus . . . Yet, at the same time, probably no area of campus life has been so devoid of policy initiatives than has the campus racial climate at individual institutions (Hurtado, Milem, Clayton-Pedersen, & Allen, 1998, p. 279).

If institutional leader's wish to utilize diversity to successfully transform their institutions in ways that make them more democratic and equitable and that enhance teaching and learning for all students, they must pay close attention to their campuses' climate for racial and ethnic diversity. Until recently, discussion of the importance of the institutional context(s) in creating environments in which the benefits of diversity can be fully realized has been limited. "Often neglected in the debate about diversity is the fact that achieving a racially diverse student body *by itself* is not sufficient

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to bring about desired educational outcomes. How that diversity is managed matters greatly" (Liu, 1998, p. 438).

Recently published manuscripts (Hurtado et al., 1998, 1999) document the importance of the institutional context in shaping student outcomes and provide a framework for conceptualizing and understanding the impact of various dimensions of the campus racial climate. This framework was first introduced in a study of the climate for Latino students (Hurtado, 1994) and was further developed in syntheses of research done for policy makers and practitioners (Hurtado et al., 1998, 1999). Hurtado et al. argue that most institutions typically focus on only one element of the climate: increasing the number of racial/ethnic students on campus. While this is an essential goal, it cannot be the only goal. Other elements of the climate require attention and constitute key areas on which diversity efforts should be focused.

Hurtado et al. (1998, 1999) argue that central to the conceptualization of a campus climate for diversity is the notion that students are educated in distinct racial contexts. Both external and internal (institutional) forces shape these contexts. The external components comprise two domains, representing the impact of governmental policy, programs, and initiatives and the sociohistorical forces that shape a campus's racial climate. The institutional context includes multiple dimensions that are a function of educational programs and practices. These include an institution's:

- *historical legacy of inclusion or exclusion* of various racial/ethnic groups,
- *structural diversity* in terms of the numerical and proportional representation of various racial/ethnic groups among students, faculty, and staff,
- *psychological climate,* including perceptions and attitudes between and among groups, and
- *behavioral climate,* characterized by the nature of intergroup relations on campus.

Hurtado et al. (1998, 1999) conceptualize the institutional climate as a product of these internal and external dimensions. The dimensions are not discrete; rather, they are interconnected. For example, a historical vestige of segregation affects an institution's ability to increase its racial/ethnic student enrollments, and the underrepresentation of specific groups contributes to stereotypical attitudes that affect the psychological and behavioral climate. In short, while some institutions take a "multilayered" approach to assessing diversity on their campuses and are developing programs to address the climate on campus, most fail to recognize the importance of the dynamics of these interrelated elements.

The framework for understanding campus racial climate and the many studies Hurtado et al. cite to illustrate their framework suggest that institutional leaders must make thoughtful and deliberate decisions in light of the fact that diversity enhances an institution's educational mission. When they do, they maximize the likelihood that students will benefit in unique and meaningful ways.

Summary

When college and university leaders engage diversity as part of their institutional mission, they find that diversity helps transform their campuses in fundamental and positive ways. This transformation involves changes in who is taught, what is taught, and who teaches. Paying attention to the institutional context in which diversity is promoted is paramount if institutional leaders are to successfully use campus diversity to enhance the teaching and learning missions of their institutions.

BENEFITS OF DIVERSITY TO THE ECONOMY AND PRIVATE SECTOR

Diversity in higher education confers benefits not only on individuals, colleges, and universities, but also on businesses and the private sector. In fact, much of the research regarding the institutional benefits of diverse organizations has been completed in private businesses. Business leaders indicate that an increasingly dynamic and highly competitive global market has created a demand for workers who can demonstrate cross-cultural competencies that allow them to function effectively in an increasingly diverse marketplace. Finally, research suggests that diversity in the workplace is good for business: It increases the flexibility and economic viability of businesses in ways that enable diverse businesses to maximize their earnings.

Essential Skills for Workers in a Global Economy

A report by the RAND Corporation (Bikson & Law, 1994) provides important information regarding the human resource needs that result from the rapidly developing global economy. Officials from 16 multinational corporations and 16 higher education institutions in four cities (Los Angeles, New York, Chicago, and Houston/ Dallas) were interviewed. The cities were chosen on the basis of evidence that they were "aware of and actively responding to an increasingly global economic environment and are thus likely to be on the cutting edge regarding issues of globalism" (Bikson & Law, 1994, p. vii).

The study addressed four primary areas: the ways in which globalism was understood by corporations and colleges; the human resource needs presented by these views of globalism; what colleges and corporations do (or can do) to prepare workers who can meet these human resource needs; and what still must be done to produce a workforce that will be competitive in a global economy.

Bikson and Law (1994) reported that the academic and corporate communities were in consensus about how the movement toward globalism affects the human resource needs of corporations that want to remain competitive in the global economy. Their research suggests four types of human resource needs that must be met. Workers must possess (1) domain knowledge, (2) cognitive, social, and personal skills, (3) prior experience and on-the-job training, and (4) cross-cultural competence.

Domain knowledge includes knowledge in specific subject matter areas. Bikson and Law's study suggests that colleges currently produce graduates with strong domain knowledge. However, citing concerns about the preparation of students in K-12 education, some respondents questioned colleges' and universities' abilities to continue to do this.

Corporate leaders expressed concern that students' cognitive, social, and personal skills are not being developed. *Cognitive skills* include decision making, problem solving, and learning how to learn. *Social skills* include the ability to function effectively in work groups with others of diverse backgrounds. *Personal skills* include flexibility and adaptability, openness to new ideas and approaches, empathy regarding others' perspectives, commitment to high-quality work, and innovation.

Prior work experience and on-the-job-training pertain to opportunities for students to apply their domain knowledge and social and personal skills in work settings while in college. *Cross-cultural competence* was identified as the most critical human resource need in part because it "crosses over" the other categories: "It involves some domain knowledge (in relation to other cultures) as well as social skills and personal traits that

enhance cross-cultural communication and cooperation" (Bikson & Law, 1994, p. x).

Cross-cultural competence is the human resource need most salient to this section of the status report. It comprises cognitive and affective dimensions.

> Cross-cultural competence, then, chiefly entails a widened knowledge base plus openness and adaptability to different cultural perspectives–and the willingness to learn whatever else is needed to deploy domain skills effectively in new contexts (including, perhaps, functionality in another language). Although these sound like the sorts of prerequisites universities are well-suited to fulfill, they are what corporations find in shortest supply among entry-level candidates (Bikson & Law, 1994, p. 26).

Many students are not sufficiently exposed to other cultures to learn how to work effectively with individuals who are different from them. Colleges must find ways for students to communicate regularly across communities of difference so they can develop the cross-cultural competencies that are essential to organizations' global competitiveness. Bikson and Law (1994) assert that individuals who work in the United States are equally in need of cross-cultural competence.

Bikson and Law argue that if colleges are to meet the challenges presented by an increasingly global economy, they will have to make changes in many areas, including the curriculum, extracurricular activities, faculty development, and cooperative ventures (Bikson & Law, 1994). The authors make specific recommendations about opportunities to help institutions meet these needs.

> Colleges should make better use of the cultural diversity already available in their student bodies and localities to cultivate global awareness and cross-cultural competence . . . . Colleges should provide faculty with incentives (and, if possible, with resources) to develop new courses or adapt existing courses to address globalism (Bikson & Law, 1994, p. xiv).

Finally, students "should use the cultural diversity of their own campuses and localities to develop cross-cultural competence" (Bikson & Law, 1994, p. xv). Clearly, diverse colleges and universities provide an environment for learning that can be helpful in providing students with the critical skills and competencies required in an economy–both domestic and global–that needs cross-culturally competent workers.

Ways in Which Diversity Enhances Organizational Performance

In a review of the impact of cultural diversity in organizational settings, Cox (1993) suggests that three types of organizational goals are achieved by managing diversity effectively. These goals pertain to moral, ethical, and social responsibility; legal obligations; and economic performance. Cox cites research evidence indicating that a relationship exists between the affective and achievement outcomes of individuals and dimensions of diversity (gender, race, and age). Specific outcomes include job involvement levels, employee turnover, promotability ratings, and levels of value congruence.[7] Cox asserts that properly managing diversity leads to lower turnover rates, greater use of flextime work scheduling, and greater work team productivity. Organizations that capitalize on their diversity should enjoy a competitive cost advantage (Cox, 1993; Reskin, 1998).

Research evidence supports the idea that diverse work teams promote creativity and innovation (Cox, 1993; Reskin, 1998). Organizational diversity has been shown to enhance productivity by better utilizing workers' skills (Reskin, 1998). Kanter's (1983) study of innovation in organizations found that the most innovative companies deliberately establish heterogeneous work teams. Kanter notes that innovative organizations are more likely to have effectively combated racism, sexism, and classism within their ranks. They also are likely to employ more women and non-white men.

Nemeth (1986, cited in Cox, 1993) indicates that racial/ethnic minority viewpoints stimulate consideration of previously unconsidered alternatives in work groups. In a related study, after holding ability levels constant, heterogeneous work groups were judged to be more creative than more homogeneous groups (Triandis, Hall, & Ewen, 1965, cited in Cox, 1993). Attitudes, beliefs, and cognitive functioning vary on the basis of characteristics of race, gender, and age (Cox, 1993). Other research (McLeod, Lobel, & Cox, 1993) indicates that in a brainstorming exercise, racially diverse groups of Asians, blacks, whites, and Latinos generated ideas of the same quantity, but of higher quality, than racially homogeneous groups.

Citing evidence of the "group think" phenomenon,[8] Cox's synthesis of research indicates that diverse groups are more likely to do a better job of problem solving than more homogeneous groups. Because of homogeneous groups' tendency to be inordinately concerned with maintaining cohesiveness, they are more likely to be victims of this problem. Nemeth (1985, cited in Cox, 1993) and Nemeth and Wachter (1983, cited in Cox, 1993) found that groups with minority members were more likely than homogeneous groups to generate higher levels of critical analysis in problem solving. Cox argues that "culturally diverse workforces have the potential to solve problems better because of several factors: a greater variety of perspectives brought to bear on the issue, a higher level of critical analysis of alternatives, and a lower probability of group think" (Cox, 1993, p. 35).

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The final organizational benefit of diversity identified by Cox (1993) pertains to the flexibility of organizations that have a greater representation of racially diverse members. Research suggests "that members of racial/ethnic minority groups tend to have especially flexible cognitive structures" (Cox, 1993, p. 35). Cox contends that the process of managing diversity is likely to enhance organizational flexibility. Organizations that are not supportive of diversity tend to be rigid and inflexible, as evidenced by narrow thinking and narrowly defined evaluation criteria (Cox, 1993).

In addition to detailing the many benefits that accrue to more diverse organizations, Cox identifies a set of problems that may result as organizations attempt to diversify themselves. For example, diversity can lead to lower levels of cohesiveness. While cohesiveness has been shown to enhance morale and communication, there is no evidence that it enhances work performance (Cox, 1993).

Diverse organizations also tend to communicate less effectively. As a result, members' anxieties may rise, conflict may increase, and members may feel less comfortable in the group (Cox, 1993). Similarly, theory and research in race relations suggest that conflict increases as the presence of minorities increases in a given organizational context (Blalock, 1967). Organizations must be purposeful and deliberate in their movement to diversify. Yet Cox asserts that the advantages of more diverse organizations far outweigh the disadvantages:

> In certain respects, then, culturally diverse work groups are more difficult to manage effectively than culturally homogeneous work groups. In view of this, the challenge for organizations . . . is to manage in such a way as to maximize the potential benefits of diversity while minimizing the potential disadvantages (Cox, 1993, p. 39) .

The proportion of women and men of color in the U.S. workforce, as well as in Europe's and the world's, continues to increase (Judy & D'Amico, 1997; Cox, 1993). In the United States, whites' representation in the workforce is expected to decrease from 76 percent in 1995 to approximately 68 percent in 2020. While Asian Americans show the greatest proportional growth in the population, Latinos show the largest growth in absolute numbers and will account for 36 percent of the total popula-

tion increase between 1990 and 2020 (Judy & D'Amico, 1997). These changes will be more dramatic in particular regions of the country. For example, in California, 42 percent of the population in 2020 will be Latino, 18 percent Asian, and 33 percent white (Judy & D'Amico, 1997). If organizations are to successfully meet their human resource needs, they must hire and retain workers from diverse groups.

Even as the workforce is becoming more diverse, consumer markets are as well. People of color currently represent more than $500 billion in consumer spending in the United States (Cox, 1993). Research indicates that sociocultural identity affects buying behavior. A diverse workforce can help organizations identify the ways in which culture affects consumers' buying decisions. For example, people of color are more likely to do business with individuals from their own cultural group (Cox, 1993). Therefore, having a diverse organization facilitates selling goods and services in an increasingly diverse marketplace. In addition, there is increasing public relations value for businesses and organizations that are identified as managing diversity well.

Increasing the Representation of People of Color in Leadership Positions in the Private Sector

Upper-level leaders of private businesses are not as diverse as the rest of the labor force. While 57 percent of the workforce consists of women and people of color (increasing to 62 percent in just five years), between 3 and 5 percent of senior-level managers are from these groups. Whites fill 97 percent of the senior management positions at Fortune 1000 industrial and Fortune 500 companies. Of these senior managers, 95 to 97 percent are male. In the Fortune 2000 industrial and service companies, only 5 percent of senior managers are women, and nearly all of them are white *(Good for Business,* 1995).

Women and people of color also are poorly represented on corporate boards of directors. Fewer than 10 percent of the largest corporations in the United States had any women on their boards of directors in 1995. Representation by persons of color was even lower. In 1995, fewer than 3 percent of board seats were held by people of color *(Good for Business,* 1995).

Clearly, data from the mid-1990s indicate that little progress had been made toward reducing or eliminating the "glass ceiling" for women and people of color that was first discussed in the *Report on the Glass Ceiling Initiative* in 1991. The *Good for Business* (1995) report suggests that maintaining homogeneous upper-level management teams is a poor business practice. By excluding women and people of color from upper-level management tracks, businesses severely limit the talent pool. Some evidence suggests a relationship between business profits and increased access by women and men of color to senior management positions. Companies that were able to "shatter" their own glass ceilings realized stock market returns that were about two-and-one-half times better than comparable companies that had not done so. Companies that scored in the bottom 100 of glass ceiling-related measures earned, on average, a 7.9 percent return on investment, compared to an average return of 18.3 percent for the top 100 companies *(Good for Business,* 1995).

Higher education can help reduce the barriers that prevent women and people of color from attaining senior management positions. Some barriers can be reduced by providing students with opportunities to interact with others from diverse racial and ethnic backgrounds. Over time, this kind of involvement helps reduce some of the prejudice, stereotypes, and biases that frequently are directed at women and people of color–in business and industry as well as in society.

The diversification of institutions of higher education can also help private sector organizations reduce structural barriers to career progress and increase the flow of women and people of color into the pipeline that supplies senior management. Employees who enter the pipeline from which most senior management positions are drawn tend to be graduates of highly selective colleges and universities. If the representation of people of color in the senior management pipeline is to increase, so must the representation of people of color at selective colleges and universities. If this does not occur, the numbers of people of color who become corporate leaders will most certainly decrease. This will not bode well for the continued economic viability of many of the nation's largest employers.

Research on the Impact of Affirmative Action[9] in the Workplace

> Although many Americans would prefer a labor market that never takes race or gender into account, as long as employers and employment practices routinely discriminate against minorities and women, the choice is not between meritocracy and affirmative action, it is between discrimination and affirmative action (Reskin, 1998, p. 93).

Reskin (1998) recently completed a review of the research literature regarding the impact of affirmative action programs in employment. This review indicates that affirmative action programs have increased the representation of minority men and women in the workforce. Affirmative action in employment has led to greater access to professional, managerial, and craft occupations for minority men and women and has lessened wage discrimination (Reskin, 1998). Carnoy (1994, cited in Reskin, 1998) estimates that at least one-third of the earnings gains for African-American and Latino workers during the 1960s can be attributed to declines in wage discrimination resulting from anti-discrimination legislation and affirmative action programs.

Reskin (1998) summarizes findings from a number of studies that compared outcomes for firms with and without affirmative action programs. These studies suggest that opportunities for white women and African-American men were much greater at firms that practiced affirmative action than at firms that did not. Other studies indicate that employment discrimination is less likely to occur in firms and industries that actively promote affirmative action in employment. Research suggests that occupational segregation has steadily decreased over the past three decades. "By preventing discrimination, affirmative action has opened thousands of jobs to women and minorities that discrimination had formerly closed to them" (Reskin, 1998, p. 54). While the decline in occupational segregation has been accompanied by a decline in wage disparities, significant wage disparities between blacks and whites remain.

Affirmative action programs in employment help raise the career aspirations of minorities and women. In the same way in which some people lower their aspirations if they perceive limited opportunities in a given field, research indicates they will pursue opportunities in fields they perceive as being open to them (Kanter, 1977; Reskin & Hartmann, 1986; Markham, Harlan, & Hackett, 1987; Jacobs, 1989; Cassirer & Reskin, 1998; all cited in Reskin, 1998). By reducing the perception that discriminatory barriers block access to certain lines of work, affirmative action curtails women's and minorities' self-selection regarding certain jobs and/or promotions (Reskin & Roos, 1990, cited in Reskin, 1998).

Opponents of affirmative action allege that beneficiaries of these programs engage in a process of self-doubt regarding their abilities and qualification for the jobs they receive (Steele, 1990, cited in Reskin, 1998). However, research suggests that stigmatization by others poses much greater risk than self-stigmatization. Employers can greatly reduce the risk of stigmatization by providing accurate information about their affirmative action programs (Reskin, 1998).

Much of the resistance to affirmative action programs comes from those who perceive that they are at risk of being penalized. One of the most frequent criticisms of affirmative action is that it involves "reverse discrimination." Research suggests that "reverse discrimination is rare both in absolute terms and relative to conventional wisdom" (Reskin, 1998, p. 72). Steeh and Krysan (1996, cited in Reskin, 1998) found that only 5 to 12 percent of whites indicated that they felt their race had cost them a job or promotion, compared to more than one-third of African Americans. However, between 66 and 80 percent of whites (compared to one-quarter of African Americans) surveyed during the 1990s reported that they thought African Americans with lesser qualifications had been given jobs or promotions over "more qualified" whites (Taylor, 1994; Davis & Smith, 1994; Steeh & Krysan, 1996; cited in Reskin, 1998).

Data from the Equal Employment Opportunity Commission (EEOC) indicate exceptionally low proportions of reverse discrimination charges in employment. Only 4 percent of the discrimination claims filed with the EEOC between 1987 and 1994 charged reverse discrimination (Norton, 1996, cited in Reskin, 1998). Of the cases that actually made it to court between 1990 and 1994, only 2 percent charged reverse discrimination

(U.S. Department of Labor, Employment Standards Administration, cited in Reskin, 1998). "Finally, allegations of reverse discrimination are less likely than conventional discrimination cases to be supported by evidence" (Reskin, 1998, p. 73).


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Summary

Research on the organizational impact of diversity suggests that when it is managed correctly, diversity benefits organizations by helping attract the best available talent, enhancing marketing efforts, increasing creativity and innovation, improving problem-solving abilities, and improving organizational flexibility. Research indicates that affirmative action in employment has led to decreased job discrimination, decreased wage disparities, decreased occupational segregation, increased occupational aspirations for women and people of color, and greater organizational productivity. There is little empirical evidence that supports the view that those who benefit from affirmative action suffer from self-stigmatization. Finally, evidence supporting charges of reverse discrimination is "rare both in absolute terms and relative to conventional wisdom" (Reskin, 1998, p. 72).

SOCIETAL BENEFITS

The previous sections of this report discuss evidence of the ways in which diversity benefits students, higher education institutions, and businesses and the economy. One final category of outcomes remains to be discussed: These outcomes focus on the ways in which higher education prepares students to function effectively as citizens of an increasingly diverse society. This section of the report describes the ways in which participation in higher education by diverse students helps meet some of the basic needs of those in society who are most underserved.

Democracy Outcomes

Democracy outcomes refer to the ways in which higher education prepares students to become involved as active participants in an increasingly diverse and complex society. Gurin (1999) suggests that three major categories–citizenship engagement, racial/cultural engagement, and compatibility of differences–characterize democracy outcomes. *Citizenship engagement* refers to students' interest in and motivation to influence society and the political structure as well as to participate in community and volunteer service. *Racial/cultural engagement* refers to students' levels of cultural awareness and appreciation and their commitment to participating in activities that promote racial understanding. *Compatibility of differences* refers to an understanding by students that there are common values across racial/ethnic groups, that group conflict can be constructive when it is handled appropriately, and that differences do not have to be a divisive force in society. Another type of democracy outcome discussed by Gurin relates to students' ability to live and work effectively in a diverse society. Specifically, this refers to the extent to which college prepares students to succeed after college and the extent to which students' college experience breaks a pattern of continuing segregation in society.

Research supports the positive impact of interaction with diverse people and ideas while in college. The extent to which students interacted cross-racially is influential in

determining the amount of acceptance students report for people from other cultures, the rate at which they participate in community service programs, and the amount of growth they exhibit in other areas of civic responsibility (Bowen & Bok, 1998). Similarly, involvement in more racially diverse environments and activities leads to higher levels of cultural awareness and acceptance and increased commitment to the goal of improving racial understanding (Milem, 1992, 1994; Sax & Astin, 1997). Conversely, the absence of interracial contact adversely influences students' views toward others, support for campus initiatives, and educational outcomes. White students who had the least social interaction with individuals of a different background were less likely to express positive attitudes about multiculturalism on campus (Globetti, Globetti, Brown, & Smith, 1993).

Research on School Desegregation

Many desegregation studies have found that minority segregation that occurs in educational settings tends to be perpetuated over stages of the life cycle and across institutional settings (Braddock, 1985). Most of the research pertaining to the effects of desegregation has been done in K–12 rather than in higher education institutions. Hence, this section on the impact of school desegregation is included here.

TEXAS STATE TECHNICAL COLLEGE

Braddock, Crain, and McPartland (1984) affirm that "school desegregation is leading to desegregation in several areas of adult life" (p. 261), including college, social situations, and jobs. Their analyses indicate that desegregation changes the attitudes and behaviors of whites and blacks. This is apparent in diminishing racial stereotypes and lessened fears of hostile reactions in interracial settings among white adults who were educated in desegregated settings as children.

Braddock (1985) asserts that "one of the most important aspects of racial segregation is its tendency to perpetuate itself" (p. 11). This is true both for majority and for minority individuals. For example, research suggests that segregation in elementary and secondary schools is perpetuated in college. Braddock (1980) and Braddock and McPartland (1982) found that black students who had attended desegregated elementary and secondary schools were more likely to attend desegregated colleges. Early school and community desegregation tends to promote adult desegregation in work environments (Braddock & McPartland, 1989). This is especially true for blacks living in the northern United States, where the relationship between school and community desegregation has been less confounded. Braddock, McPartland, and Trent (1984) found that blacks and whites who attended desegregated schools were more likely to work in desegre-

gated firms than were their peers who attended segregated schools. In an extension of this earlier work, Braddock, Dawkins, and Trent (1994) found that whites who attended desegregated schools were more likely to work with black or Latino coworkers. Moreover, black and Latino students who attended desegregated schools were more likely to work in environments where they had white coworkers.

In related findings, Braddock and Dawkins (1981) found that students–particularly blacks who attended desegregated high schools–were more likely than students who attended segregated high schools to receive better grades in college. Another study demonstrated a greater likelihood of persistence in college among those blacks who attended desegregated high schools (Green, 1982). Despite these findings regarding the positive impact of desegregation, segregation at the high school level is actually increasing (Orfield & Eaton, 1996). Thus, college may be the first (and only) place where many students encounter and interact with someone of a different race or ethnicity (Hurtado et al., 1998, 1999). Opportunities to interact with diverse peers in college can help disrupt the perpetuation of segregation in our society. Research indicates that high levels of engagement with diversity in college lead to engagement with diversity after college (Gurin, 1999).

> Diversity experiences during college had impressive effects on the extent to which graduates in the national study were living racially and ethnically integrated lives in the post-college world. Students who had taken the most diversity courses and interacted the most with diverse peers during college had the most cross-racial interactions five years after leaving college. This confirms that the long-term pattern of segregation noted by many social scientists can be broken by diversity experiences during college (Gurin, 1999, p. 133).

Civic and Professional Involvement

Bowen and Bok (1998) argue that one of the central goals of higher education institutions is to educate students to become good citizens. Hence, many colleges and universities select students with the expectation that they eventually will give something back to society through their involvement in professional, social, and civic organizations. In recent years, institutions have extended their belief in the value of this mission to the need to diversify their student bodies. They have come to understand their obligation to educate and to develop an expanded pool of "black and Hispanic men and women who could assume leadership roles in their communities and in every facet of national life" (Bowen & Bok, 1998, p. 156). As our society has become increasingly diverse, the need for leaders who represent the needs, interests, and perspectives of diverse communities has increased dramatically.

Studies of student involvement in community and civic service suggest that students of color who are educated at selective institutions are much more likely than their white peers to "give back" to society once they graduate. In their study of black and white students who attended institutions with selective admissions policies, Bowen and Bok (1998) found that black students who attended these institutions were likely to be widely involved in civic and community activities. The study analyzed data representing the experiences of two cohorts of students. Data pertaining to the earlier cohort of students (1976) indicated that black students were more likely than their white peers to be involved in community and civic organizations. Moreover, black men were much more likely than white men to be involved in leadership positions in organizations with a civic focus. This was especially true in organizations focusing on social service, youths, and school-related activities. Black women were more likely than white women to report that they held leadership positions "in community, social service, alumni/ae, religious, and professional groups" (Bowen & Bok, 1998, p. 160). Finally, black students were more likely than white students to report that they held positions of leadership in multiple civic and community organizations. This is explained largely by the fact that these students were more likely to have obtained advanced degrees than their peers who attended less selective institutions.

Black students who obtained advanced degrees were more likely than their white peers to be involved in community and social service organizations. This was true for lawyers (21 percent involvement by blacks compared to 15 percent by whites), physicians (18 percent for blacks compared to 9 percent for whites), and, most dramatically, for PhDs (33 percent for blacks compared to only 6 percent for whites).

> The black alumni/ae of these schools have already demonstrated a marked tendency to "give something back" through participation and leadership outside the workplace as well as within it. This civic spirit, revealed through actions taken rather than good intentions expressed, and demonstrated over time through volunteering in schools, neighborhoods, museums, and civic associations of every kind, is surely one important indicator of "merit" (Bowen & Bok, 1998, p. 192).

Benefits Accruing from Diversification of the Medical Profession

> Producing a physician workforce that reflects this country's rich diversity is important not only for reasons of social equity, but also to ensure the delivery of health care that is competent both technically and culturally (Nickens, Ready, & Petersdorf, 1994, p. 472).

Approximately one person in five in our country lives in an area designated as having insufficient health care coverage. The health care crisis faced by residents of low-income communities and low-income communities of color, in particular, is striking. The crisis is due largely to insufficient access to health care providers.

The medical community has conducted extensive research that establishes the societal value of racial and ethnic minority participation in the medical profession. For example, physicians of color are more likely than white physicians to provide care for underserved populations. Keith, Bell, Swanson, and Williams (1985) have been cited widely as the first scholars to provide empirical evidence that minority physicians were significantly more likely than their white counterparts to provide health care to populations in our society that need it most. This was reflected in the type of medicine and the geographic area in which minority doctors practiced. Nearly one-third more minority doctors than nonminority physicians (55 percent and 41 percent, respectively) chose primary care specialties. Moreover, physicians of color were twice as likely as nonminority physicians (12 percent vs. 6 percent) to practice in areas designated by the federal government as health-manpower shortage areas. This was true for all of the medical subspecialties included in the sample (not just primary care physicians). Finally, minority graduates were more likely than nonminority graduates to have Medicaid recipients as patients (31 percent for blacks, 24 percent for Latinos, and 14 percent for whites). The authors therefore argue that "by increasing the number of minority physicians, affirmative action programs have substantially improved access to care among minority populations" (Keith et al., 1985, p. 1523).

Recently, Komaromy, Grumbach, Drake, Vranizan, Lurie, Keane, and Bindman (1997) used data from the AMA masterfile to build upon the findings of Keith et al. (1985) in their study of the practice patterns of physicians in California. Urban areas of poverty with high proportions of black and Latino residents had the worst physician-to-population ratios; poor urban areas with low proportions of black and Latino residents had nearly three times as many primary care physicians. The salience of race to health care availability is further evidenced by the fact that communities with high proportions of black or Latino residents were four times as likely as others to experience a shortage of physicians, regardless of level of community income (Komaromy et al., 1997).

Latino and black physicians were more likely to locate their practices in areas with the greatest need for primary care doctors; they also tended to locate their practices in poorer areas than white physicians did. Black physicians practiced medicine in areas where the mean percentage of black residents was five times greater than where other physicians practiced. Black physicians cared for six times as many black patients as did other physicians. Similarly, Latino physicians practiced in areas with significantly more Latinos. Latino physicians cared for three times as many Latinos as did other physicians. These findings held in multivariate analyses after controlling for the fact that greater proportions of people from these groups lived in the areas where these physicians practiced. Black physicians were most likely to care for patients insured by Medicaid (45 percent of their patients compared to 18 percent of white physicians' patients, 24 percent of Latino physicians' patients, and 30 percent of Asian physicians' patients). Latino physicians were more likely to provide care to patients without insurance (9 percent compared to 3 percent for black physicians, 4 percent for

SEATTLE COMMUNITY COLLEGES/PHOTO: BOB HEREFORD

Asian physicians, and 6 percent for white physicians). Black and Latino physicians play an essential role in providing health care for poor people and members of minority groups (Komaromy et al., 1997).

Other recent studies report similar findings. Cantor, Miles, Baker, and Barker (1996) found that minority and women physicians were much more likely than nonminority male physicians to serve minority, poor, and Medicaid recipients. Moreover, while the relationship between the physicians' own socioeconomic background and tendency to serve these populations was weak, race and sex were the variables that most strongly and consistently predicted physicians' decisions to practice in these areas. Xu, Fields, Laine, Veloski, Barzansky, and Martini (1997) reported similar findings in a study that controlled for the effects of gender, family income, residence, and National Health Services financial aid obligations on practice patterns. Analyses of national data from the Association of American Medical Colleges (AAMC, 1994) showed that 40 percent of medical school graduates who were members of underrepresented minority groups (blacks, Mexican Americans, mainland Puerto Ricans, and American Indians) indicated that they planned to practice medicine in underserved areas; fewer than one in ten (9 percent) of other medical school graduates expressed a similar desire. Nearly six in ten medical generalists from underrepresented groups reported that they planned to practice in these areas, compared to just 24 percent of nonminority medical generalists. Moy and Bartman's (1995) study of physician practice patterns reported similar findings based on data gathered from a nationally representative sample of patients.

Each of these studies illustrates the important role that physicians of color play in addressing the health care needs of the most medically underserved communities in our society. Physicians of color are significantly more likely to pursue medical specialties that address the needs of medically underserved people and to locate their practices in areas convenient to the medically underserved. Moreover, the salience of race in predicting service to these communities holds even after controlling for the effects of socioeconomic status, gender, and National Health Service financial obligations. Hence, any plans to alter affirmative action to focus on economic disadvantage or to elimi-

nate it altogether would further imperil the people who live in the most medically underserved communities in our country.

Changes to affirmative action policy in California and similar threats in other states present serious obstacles to increasing the representation of people of color in the medical profession. Despite efforts by members of the medical community to diversify the nation's medical schools, the number of applicants from minority groups decreased 7 percent this year. The Association of American Medical Colleges reported that the number of applicants from underrepresented racial/ethnic groups fell to its lowest point since 1992. The decrease was most evident among black male applicants (down 15 percent). Through its Project 3,000 by 2000, AAMC hoped to have 3,000 minority students enrolled in first-year medical classes by the year 2000. This goal will be impossible for AAMC to reach: Minority student enrollment in medical school in 1999-2000 (1,731 students) falls well below the goal *(Chronicle of Higher Education,* daily news, 27 October 1999).

Summary

Research evidence clearly indicates that greater exposure to racial and ethnic diversity in college leads to growth in democracy outcomes. Students who have been exposed to greater diversity are more likely to demonstrate increases in racial understanding, cultural awareness and appreciation, engagement with social and political issues, and openness to diversity and challenge. They are more likely to exhibit decreases in racial stereotyping and ethnocentrism. Students who interacted more with diversity in college exhibited more liberal racial attitudes four and nine years after entering college. Moreover, greater engagement with diversity while in college leads to growth in civic responsibility. This is evident in increased commitment to the goal of promoting racial understanding, greater involvement in community and volunteer service, and higher levels of involvement in community action programs. All of these outcomes are intimately related to what it means to be a productive citizen in an increasingly pluralistic, democratic society.

Research indicates that interacting with diversity while in college disrupts the cycle of segregation that prevails in our society. Students who attend institutions with higher levels of diversity and who report high levels of interaction with diverse people and information are more likely to live and work in desegregated environments after leaving college. Interacting with diverse ideas and people while in college encourages students to continue these behaviors throughout their lifetimes. Gurin's (1999) findings suggest this is particularly true for whites. This is significant given that college is likely to be the first time most students will have the opportunity to be educated and to live in a racially diverse setting.

Research suggests that students of color benefit our society through their high levels of service to community and civic groups as well as medically underserved populations. Bowen and Bok (1998) found that African-American students were much more likely than white students to be involved in community and civic organizations, as well as in the leadership of these organizations. Studies of physicians' practice patterns indicate that doctors of color are more likely to practice medicine in areas with populations that have the greatest need for health services. These areas include low-income urban and rural locations, locations with high populations of people of color, populations that rely on Medicare for their health insurance, and populations that do not have any health insurance.

THE ROLE AND RESPONSIBILITY OF INDIVIDUAL CAMPUSES REGARDING DIVERSITY IN HIGHER EDUCATION

> [I]t is a mistake to understand the diversity rationale only as an issue concerning admissions rather than as an issue implicating broader institutional policy. Thus, to establish a "compelling interest" in educational diversity, a university must demonstrate clear, consistent internal policies and practices designed to facilitate interracial contact, dialogue, and understanding on campus (Liu, 1998, p. 439).

In the preceding pages, we have discussed important evidence of the educational benefits of diversity from a broad, multidisciplinary perspective. It is our hope that this evidence will be used to influence legal and public opinion regarding the value of diversity to teaching and learning. However, the most persuasive evidence is that provided by colleges and universities themselves.

Individual campuses have a responsibility to engage in activities that provide evidence that diversity is a principal component of their educational mission.[10] In planning and implementing institutional efforts regarding campus diversity, it is important that individual campuses provide evidence that documents: (1) the educational need for diversity, (2) the educational outcomes of diversity, and (3) the ways in which institutions use their diversity to enhance teaching and learning.

In his opinion in the *Bakke* decision, Justice Powell asserted that race can be used as one of many factors in college admissions because institutional diversity helps facilitate the robust exchange of ideas. However, recent attacks on affirmative action question the validity of using race and ethnicity as a means to achieve diversity on campus. Hence, it is essential that institutions document findings from their own research that establish diversity as an educational imperative for their campuses as well as the important role of racial/ethnic diversity in creating institutional diversity. The "diversity rationale" argues that bringing together diverse people with diverse experiences and viewpoints is important because it helps institutions achieve their academic mission. In order to make effective use of this rationale, an institution should provide clear answers to the following questions:

- How does the institution define diversity?
- How do the institution's core educational goals relate to its diversity objectives?
- What are the educational benefits of diversity to the institution?
- What evidence can the institution provide indicating that these outcomes are being realized?
- What evidence can the institution provide that demonstrates that it has enacted clear and consistent educational policies and practices that help ensure that the benefits of diversity are realized?

By answering these questions, individual institutions will be able to document the ways in which a diverse student body enhances the mission of the school and/or program in which it exists. ◙

ENDNOTES

[1] This passage is drawn from a statement drafted by the American Council on Education and endorsed by 49 national education associations.

[2] These misconceptions were compiled as part of the work of the Panel on the Dynamics of Race in Colleges and Universities. The panel was commissioned by James Banks during his tenure as president of the American Educational Research Association (AERA) and was co-chaired by Kenji Hakuta and James Jones. The panel's work was funded by AERA and Stanford University's Center for Comparative Studies in Race and Ethnicity.

[3] Persistence is a function of an interactive process between individuals and the institutions they attend. A large body of research documents the importance of the institutional context in shaping a variety of student outcomes. The importance of the institutional context for diversity is discussed later in this report.

[4] Examples of complex social structures include "...situations where we encounter many rather than few people, when some of these people are unfamiliar to us, when some of them challenge us to think or act in new ways, when people and relationships change and thus produce some unpredictability, and, especially, when people we encounter hold different kinds of expectations of us" (Gurin, 1999, p. 105).

[5] Although black men and women who attended selective institutions earned more than blacks who graduated from other institutions, the Bowen and Bok study replicates findings from other studies that indicate a persistent and troublesome earnings gap between black and white college graduates. Black men and women graduates' earnings were significantly less than their white peers'. Multivariate analyses revealed that blacks were likely to earn significantly less than their white colleagues after controlling for the effects of grades, college majors, and socioeconomic status.

[6] For more information about this survey, see *The American College Teacher: National Norms for the 1998–99 HERI Faculty Survey* (Sax, Astin, Korn, & Gilmartin, 1999).

[7] In the studies cited by Cox (1993), *value congruence* refers to the extent to which production workers and their supervisors find agreement in business settings. The studies indicate that higher levels of value congruence have a positive influence on individual outcomes (i.e., organizational commitment and worker satisfaction) and organizational outcomes (i.e., greater punctuality, lower turnover rates, higher levels of innovation).

[8] Abelson and Levy (1985) define *group think* as "a strong psychological drive for consensus within insular, cohesive decision-making groups such that disagreement is suppressed and the decision process becomes defective" (p. 292).

[9] "The term 'affirmative action' came into being with President John F. Kennedy's issuance of Executive Order 10925 in 1961, but it did not have more than symbolic effect until President

Lyndon B. Johnson's more definitive Executive Order 11246 in 1965, which remains operative today. Executive Order 11246 states that any institution, public or private, employing 50 or more persons or having $50,000 in government contracts is required to file an affirmative action plan and is required to take affirmative action to seek out and employ qualified and underrepresented minorities (women were added in 1967 with Executive Order 11375) in its workforce. These measures were augmented by the more comprehensive Civil Rights Act of 1964, which, in its Title VII, forbade all forms of discrimination in public and private sector hiring (though higher education faculty were exempted until 1972).

The affirmative action mandate was broadened with the passage of the Architectural Barriers Act of 1968, which required that buildings be modified to be accessible to people with disabilities; Title IX of the Education Amendments of 1972, which prohibited sex discrimination in any federally assisted education program; and Section 504 of the Education Amendments of 1973, which required nondiscrimination in employment of people with disabilities. Subsequently, age discrimination was added with the passage of the Age Discrimination Act of 1975.

Under President Richard M. Nixon, the Department of Labor in 1972 issued Revised Order No. 4, which detailed specific goals and timetables that effective plans were expected to have. The Office of Federal Contract Compliance Programs was established to monitor compliance with these dictates. Compliance in hiring is monitored by the Equal Employment Opportunity Commission" (Wilson, 1995, pp. 37-38).

[10] The evidence and expert testimony assembled by the University of Michigan is an excellent example of this type of institutional activity. For more information, visit the university's web site at www.umich.edu.

References

Abelson, R., and Levy, A. 1985. "Decision making and decision theory." In *Handbook of Social Psychology, Vol. 1.* G. Lindzey & E. Aronson, eds. New York: Random House.

Alger, J. R. 1997. "The educational value of diversity," *Academe* 20 (January/February 1998).

Association of American Medical Colleges. 1994. "Roles for medical education in health care reform." *Academic Medicine* 69(6): 512–15.

Association of American Universities. "On the importance of diversity in university admissions," *New York Times*, 24 April 1997: 27.

Astin, A. W. 1968. *The College Environment.* Washington, DC: American Council on Education.

Astin, A. W. 1991. *Assessment for Excellence: The Philosophy and Practice of Assessment and Evaluation in Higher Education.* New York: Macmillan.

Astin, A. W. 1993. *What Matters in College: Four Critical Years Revisited.* San Francisco: Jossey-Bass.

Bikson, T. K., and Law, S. A. 1994. *Global Preparedness and Human Resources: College and Corporate Perspectives.* Santa Monica, CA: RAND Corporation.

Blalock, J. M. 1967. *Toward a Theory of Minority-Group Relations.* New York: Wiley.

Bowen, W. G., and Bok, D. 1998. *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions.* Princeton, NJ: Princeton University Press.

Braddock, J. H. 1980. "The perpetuation of segregation across levels of education: A behavioral assessment of the contact hypothesis," *Sociology of Education* 53: 178–86.

Braddock, J. H. 1985. "School desegregation and black assimilation," *Journal of Social Issues* 41(3): 9–22.

Braddock, J. H., Crain, R. L., and McPartland, J. M. 1984. "A long-term view of school desegregation: Some recent studies of graduates as adults," *Phi Delta Kappan,* December 1984: 259–64.

Braddock, J. H., and Dawkins, M. 1981. "Predicting achievement in higher education," *Journal of Negro Education* 50: 319–27.

Braddock, J. H., and McPartland, J. M. 1982. "Assessing school desegregation effects: New directions in research." In *Research in Sociology of Education and Socialization, Volume 3.* Greenwich, CT: JAI.

Braddock, J. H., and McPartland, J. M. 1989. "Social psychological processes that perpetuate racial segregation: The relationship between school and employment desegregation," *Journal of Black Studies* 19: 267–89.

Braddock, J. H., Dawkins, M. P., and Trent, W. 1994. "Why desegregate? The effect of school desegregation on adult occupational segregation of African Americans, whites, and hispanics," *International Journal of Contemporary Sociology* 31(2): 271–83.

Braddock, J. H., McPartland, J. M., and Trent, W. 1984. *Desegregated Schools and Desegregated Work Environments.* Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, Louisiana.

Cantor, J. C., Miles, E. L., Baker, L. C., and Barker, D. C. 1996. "Physician service to the underserved: Implications for affirmative action in medical education," *Inquiry* 33: 167–80.

Carnoy, M. 1994. *Faded Dreams: The Politics and Economics of Race in America.* New York: Cambridge University Press.

Cassirer, N. R., and Reskin, B. F. 1998. "The effect of organizational context on women's and men's attachment to their jobs." Unpublished manuscript, Department of Sociology, Notre Dame University, South Bend, Indiana.

Chang, M. J. 1996. *Racial Diversity in Higher Education: Does a Racially Mixed Student Population Affect Educational Outcomes?* Ph.D. dissertation, University of California, Los Angeles.

Chang, M. J. 1999a. "Expansion and its discontents: The formation of Asian American studies programs in the 1990s," *The Journal of Asian American Studies* 2(2): 181–06.

Chang, M. J. 1999b. "An examination of conceptual and empirical linkages between diversity initiatives and student learning in higher education." Manuscript presented at ACE Working Conference and Research Symposium on Diversity and Affirmative Action, January 1999, Washington, DC.

Chang, M. J. 1999c. "Does diversity matter? The educational impact of a racially diverse undergraduate population," *Journal of College Student Development* 40(4): 377–95.

Chang, M. J., Witt-Sandis, D., Jones, J., & Hakuta, K., Eds. In press. *Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education.* Palo Alto: Stanford University Press.

Chronicle of Higher Education. Daily Internet news, 27 October 1999. www.chronicle.com.

Chronicle of Higher Education. "On the importance of diversity in higher education" 13 February 1998: A48.

Coser, R. 1975. "The complexity of roses as a seedbed for individual autonomy." In *The Idea of Social Structure: Papers in Honor of Robert Merton.* L. A. Coser, ed. New York: Harcourt Brace Jovanovich.

Cox, T. H. 1993. *Cultural Diversity in Organizations: Theory, Research & Practice.* San Francisco: Berrett-Koehler.

Cox, T. H. and Blake, S. 1991. "Managing cultural diversity: Implications for organizational competitiveness," *The Executive* 5(3): 45–56.

Daniel, K., Black, D., and Smith, J. 1997. *College Quality and the Wages of Young Men.* Unpublished manuscript.

Davis, J. A., and Smith, T. R. 1994. *General Social Survey* [MRDF]. Chicago, IL: National Opinion Research Center.

Erickson, E. 1946. "Ego development and historical change," *Psychoanalytic Study of the Child* 2: 359–96.

Erikson, E. 1956. "The problem of ego identity," *Journal of the American Psychoanalytical Association* 4: 56–121.

Garcia, M. & Smith, D. G. 1996. "Reflecting inclusiveness in the college curriculum." In *Affirmative Action's Testament of Hope: Strategies for a New Era in Higher Education.* M. Garcia, ed. Albany, New York: State University of New York Press.

Globetti, E. C., Globetti, G., Brown, C. L., and Smith, R. E. 1993. "Social interaction and multiculturalism," *NASPA Journal* 30(3): 209–18.

Good for Business: Making Use of the Nation's Human Capital. 1995. A fact finding report of the Federal Glass Ceiling Commission. Washington, DC: U.S. Department of Labor.

Green, K. C. 1982. *The Impact of Neighborhood and Secondary School Integration on Educational Achievement and Occupational Attainment of College Bound Blacks,* Ph.D. dissertation, University of California, Los Angeles.

Gurin, P. 1999. "Expert report of Patricia Gurin." In *The Compelling Need for Diversity in Higher Education. Gratz et al. v. Bollinger, et al.,* No. 97-75321 (E.D. Mich.) Grutter et al. v. Bollinger, et al., No. 97-75928 (E.D. Mich.). Ann Arbor: University of Michigan.

Hurtado, S. 1994. "The institutional climate for talented Latino students," *Research in Higher Education* 35(1): 21–41.

Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., and Allen, W. R. 1998. "Enhancing campus climates for racial/ethnic diversity through educational policy and practice," *The Review of Higher Education*, 20th Anniversary Edition 21(3).

Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., and Allen, W. R. 1999. *Enacting Diverse Learning Environments: Improving the Campus Climate for Racial/Ethnic Diversity.* ASHE/ERIC Higher Education Reports Series 26(8).

Jacobs, J. A. 1989. "Long-term trends in occupational segregation by sex," *American Journal of Sociology* 95: 160–73.

Janis, L. 1982. *Groupthink,* 2nd edition. Boston: Houghton Mifflin.

Judy, R. W., and D'Amico, C. 1997. *Workforce 2020: Work and Workers in the 21st Century.* Indianapolis: Hudson Institute.

Kanter, R. M. 1977. "Some effects of proportions on group life: Skewed sex ratios and responses to token women," *American Journal of Sociology* 82: 965–89.

Kanter, R. M. 1983. *The Change Masters.* New York: Simon & Schuster.

Keith, S. N., Bell, R. M., Swanson, A. G., and Williams, A. P. 1985. "Effects of affirmative action in medical schools: A study of the class of 1975," *New England Journal of Medicine* 313(24): 1519–25.

King, P. 1978. "William Perry's theory of intellectual and ethical development." In *Applying New Developmental Findings* (New Directions for Student Services No. 4). L. Knefelkamp, C. Widick, and C. Parker, eds. San Francisco: Jossey-Bass.

Komaromy, M., Grumbach, K., Drake, M., Vranizan, K., Lurie, N., Keane, D., and Bindman, A. B. 1997. "The role of black and Hispanic physicians in providing health care for underserved populations," *New England Journal of Medicine* 334(20): 1305–10.

Langer, E. J. 1978. "Rethinking the role of thought in social interaction." In J. Harvey, W. Ickes, R. Kiss, eds. *New Directions in Attribution Research* 2: 35–58.

Levin, S. in press. Social psychological evidence on race and racism. In *Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education.* Chang, M. J., Witt-Sandis, D., Jones, J., & Hakuta, K., eds. Palo Alto: Stanford University Press.

Liu, G. 1998. "Affirmative action in higher education: The diversity rationale and the compelling interest test," *Harvard Civil Rights-Civil Liberties Law Review* 33: 381–442.

MacPhee, D., Kreutzer, J. C., and Fritz, J. J. 1994. "Infusing a diversity perspective into human development courses," *Child Development,* 65(2): 699–715.

Markham, W. T., Harlan, S. L., and Hackett, E. J. 1987. "Promotion opportunity in organizations: Causes and consequences," *Research in Personnel and Human Resources Management* 5: 223–87.

McLeod, P. L., Lobel, S. A., and Cox, T. H. 1993. *Cultural Diversity and Creativity in Small Groups: A Test of the Value Congruence Process and Its Relationship to Individual Outcomes.* Unpublished working paper, University of Michigan, Ann Arbor.

Milem, J. F. 1992. *The Impact of College on Students' Racial Attitudes and Levels of Racial Awareness.* Doctoral dissertation, UCLA. Ann Arbor: University Microforms International (UMI), Order Number 9301968.

Milem, J. F. 1994. "College, students, and racial understanding," *Thought & Action* 9(2): 51–92.

Milem, J. F. 1999. "The importance of faculty diversity to student learning and to the mission of higher education." Paper presented at American Council on Education Symposium and Working Research Meeting on Diversity and Affirmative Action.

Milem, J. F. in press. "The educational benefits of diversity: Evidence from multiple sectors." In *Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education.* Chang, M. J., Witt-Sandis, D., Jones, J., & Hakuta, K., eds. Palo Alto: Stanford University Press.

Moy, E., and Bartman, B. A. 1995. "Physician race and care of minority and medically indigent patients," *Journal of the American Medical Association* 273(19): 1515–20.

Nemeth, C. J. 1985. "Dissent, group process, and creativity," *Advances in Group Processes* 2: 57–75.

Nemeth, C. J. 1986. "Differential contributions of majority and minority influence," *Psychological Review* 93: 23–32.

Nemeth, C. J., and Wachter, J. 1983. "Creative problem solving as a result of majority versus minority influence," *European Journal of Social Psychology* 12: 45–55.

Nickens, H. W., Ready, T. P., and Petersdorf, R. G. 1994. "Project 3000 by 2000: Racial and ethnic diversity in U.S. medical schools," *The New England Journal of Medicine* 331(7): 472.

Norton, E. H. 1996. "Affirmative action in the workplace." In *The Affirmative Action Debate.* G. Curry, ed. Reading, MA: Addison-Wesley.

Orfield, G. and Eaton, S. E. 1996. *Dismantling Desegregation: The Quiet Reversal of Brown v. Board of Education.* New York: New Press.

Orfield, G. & Whitla, D. 1999. *Diversity and Legal Education: Student Experiences in Leading Law Schools.* Cambridge, MA: Harvard Civil Rights Project.

Palmer, P. J. 1987. "Community, conflict, and ways of knowing," *Change* (September/October): 20–25.

Pascarella, E. T., Edison, M., Nora, A., Hagedorn, L. S., and Terenzini, P. T. 1996. "Influences on students' openness to diversity and challenge in the first year of college," *Journal of Higher Education* 67(2): 174–95.

Pascarella, E. T. and Terenzini, P. T. 1991. *How College Affects Students: Findings and Insights from Twenty Years of Research.* San Francisco: Jossey-Bass.

Pascarella, E.T., Whitt, E.J., Nora, A., Edison, M., Hagedorn, L.S., and Terenzini, P.T. 1996. "What have we learned from the first year of the national study of student learning?" *Journal of College Student Development* 37(2): 182–92.

Perry, W. G. 1981. "Cognitive and ethical growth." In *The Modern American College: Responding to the New Realities of Diverse Students and a Changing Society.* A. Chickering and Associates, eds. San Francisco: Jossey-Bass.

Perry, W. G. 1970. *Forms of Intellectual and Ethical Development in the College Years: A Scheme.* New York: Holt, Rinehart and Winston.

Piaget, J. 1971. "The theory of stages in cognitive development." In *Measurement and Piaget.* D. R. Green, M. P. Ford, & G. B. Flamer, eds. New York: McGraw Hill.

Piaget, J. 1975/1985. *The Equilibrium of Cognitive Structures: The Central Problem of Intellectual Development.* Chicago: University of Chicago Press.

Reskin, B. F. 1998. *The Realities of Affirmative Action in Employment.* Washington, DC: American Sociological Association.

Reskin, B. F., and Hartmann, H. 1986. *Women's Work, Men's Work: Sex Segregation on the Job.* Washington, DC: National Academy Press.

Reskin, B. F., and Roos, P. 1990. *Job Queues, Gender Queues.* Philadelphia, PA: Temple University Press.

Sax, L. J., and Astin, A. W. 1997. "The development of 'civic virtue' among college students." In *The Senior Year Experience: Facilitating Integration, Reflection, Closure, and Transition.* J. N. Gardner and G. Van der Veer, eds. San Francisco: Jossey-Bass.

Sax, L. J., Astin, A. W., Korn, W. S., & Gilmartin, S. K. 1999. *The American College Teacher: National Norms for the 1998–1999 HERI Faculty Survey.* Los Angeles: Higher Education Research Institute, UCLA.

Smith, D. G. 1995. *The Drama of Diversity and Democracy.* Washington, DC: Association of American Colleges and Universities.

Smith, D. G., with Gerbick, G. L., Figueroa, M. A., Watkins, G. H., Levitan, T., Moore, L. C., Merchant, P. A., Beliak, H. D., and Figueroa, B. 1997. *Diversity Works: The Emerging Picture of How Students Benefit.* Washington, DC: Association of American Colleges and Universities.

Springer, L., Palmer, B., Terenzini, P., Pascarella, E., Nora, A. 1996. "Attitudes toward campus diversity: Participation in a racial or cultural workshop," *Review of Higher Education* 20(1): 53–68.

Steeh, C., and Krysan, M. 1996. "The polls–trends: Affirmative action and the public. 1970-1995," *Public Opinion Quarterly* 60: 128–58.

Steele, S. 1990. *The Content of Our Character.* New York: Basic Books.

Tanaka, G. K. 1996. *The Impact of Multiculturalism on White Students.* Unpublished Ph.D. dissertation, University of California, Los Angeles. *Dissertation Abstracts International* 57(05): 1980A.

Taylor, M. C. 1994. "Impact of affirmative action on beneficiary groups: Evidence from the 1990 general social survey," *Basic and Applied Psychology* 15: 143–78.

Tierney, W. G. 1987. "Facts and constructs: Defining reality in higher education organizations." *Review of Higher Education* 11(1): 61–73.

Trent, W., Owens-Nicholson, D., Eastman, T. K., Burke, M., Daugherty, J., & Norman, K. In press. "Justice, equality of educational opportunity, and affirmative action." In *Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education.* Chang, M. J., Witt-Sandis, D., Jones, J., & Hakuta, K., eds. Palo Alto: Stanford University Press.

Triandis, H. C., Hall, E. R., and Ewen, R. B. 1965. "Member heterogeneity and dyadic creativity," *Human Relations* 18: 33–55.

Villalpando, O. 1994. "Comparing the effects of multiculturalism and diversity on minority and white students' satisfaction with college." Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Tucson, AZ, ERIC Clearinghouse, ED 375721.

Whitt, E. J., Edison, M. I., Pascarella, E. T., Terenzini, P. T., and Nora, A. 1998. "Influences on students' openness to diversity and challenge in the second and third years of college." Paper presented at the Annual Meeting of the Association for the Study of Higher Education.

Wightman, L. In press. "Standardized testing and equal access: A tutorial." *In Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education.* Chang, M. J., Witt-Sandis, D., Jones, J., & Hakuta, K., eds. Palo Alto: Stanford University Press.

Wilson, R. 1995. "Special Focus: Affirmative action and higher education" In *Minorities in Higher Education: 1995–96 Fourteenth Annual Status Report.* Wilson, R. & Carter, D. J., eds. Washington, DC: American Council on Education.

Xu, G., Fields, S. K., Laine, C., Veloski, J. J., Barzansky, B., and Martini, C. J. 1997. "The relationship between the race/ethnicity of generalist physicians and their care for underserved populations," *American Journal of Public Health* 87(5): 817–22.

Table 1

High School Completion Rates and College Participation Rates, by Race/Ethnicity: 1977 to 1997

Year	18- to 24-Year-Olds: All Persons (thousands)	18- to 24-Year-Olds: Enrolled-in-College Rate (percent)	18- to 24-Year-Olds: High School Graduates: Number Completed (thousands)	18- to 24-Year-Olds: High School Graduates: Completion Rate (percent)	18- to 24-Year-Olds: High School Graduates: Number Enrolled in College (thousands)	18- to 24-Year-Olds: High School Graduates: Enrolled-in-College Rate (percent)	14- to 24-Year-Olds: High School Graduates: Ever-Enrolled-in-College Rate (percent)
ALL RACES							
1977	27,331	26.1	22,008	80.5	7,142	32.5	52.0
1978	27,647	25.3	22,309	80.7	6,995	31.4	51.4
1979	27,974	25.0	22,421	80.1	6,991	31.2	51.6
1980	28,957	25.6	23,413	80.9	7,400	31.6	51.1
1981	28,965	26.2	23,343	80.6	7,575	32.5	51.7
1982	28,846	26.6	23,291	80.7	7,678	33.0	52.7
1983	28,580	26.2	22,988	80.4	7,477	32.5	52.8
1984	28,031	27.1	22,870	81.6	7,591	33.2	53.0
1985	27,122	27.8	22,349	82.4	7,537	33.7	54.3
1986	26,512	28.2	21,768	82.1	7,477	34.3	55.0
1987	25,950	29.6	21,118	81.4	7,693	36.4	56.5
1988	25,733	30.3	20,900	81.2	7,791	37.3	57.5
1989	25,261	30.9	20,461	81.0	7,804	38.1	57.9
1990	24,852	32.0	20,311	82.3	7,964	39.1	58.9
1991	24,572	33.3	19,883	80.9	8,172	41.1	60.7
1992	24,278	34.4	19,921	82.1	8,343	41.9	65.6
1993	25,522	33.8	20,844	81.7	8,630	41.4	65.3
1994	25,254	34.6	20,581	81.5	8,729	42.4	66.9
1995	24,900	34.3	20,125	80.8	8,539	42.4	67.1
1996	24,671	35.5	20,131	81.6	8,767	43.5	67.1
1997	24,973	36.9	20,338	81.4	9,204	45.2	67.3
WHITE							
1977	23,430	26.5	19,291	82.3	6,209	32.2	52.1
1978	23,650	25.7	19,526	82.6	6,077	31.1	51.3
1979	23,895	25.6	19,616	82.1	6,120	31.2	51.7
1980	24,482	26.2	20,214	82.6	6,423	31.8	51.4
1981	24,486	26.7	20,123	82.2	6,549	32.5	52.1
1982	24,206	27.2	19,944	82.4	6,694	33.1	53.1
1983	23,899	27.0	19,643	82.2	6,463	32.9	53.4
1984	23,347	28.0	19,373	83.0	6,256	33.7	53.8
1985	22,632	28.7	18,916	83.6	6,500	34.4	55.3
1986	22,020	28.6	18,291	83.1	6,307	34.5	55.5
1987	21,493	30.2	17,689	82.3	6,483	36.6	57.1
1988	21,261	31.3	17,491	82.3	6,659	38.1	58.6
1989	20,825	31.8	17,089	82.1	6,631	38.8	58.9
1990	20,393	32.5	16,823	82.5	6,635	39.4	60.1
1991	19,980	34.1	16,324	81.7	6,813	41.7	62.3
1992	19,671	35.2	16,379	83.3	6,916	42.2	67.0
1993	20,493	34.5	16,989	82.9	7,074	41.6	66.5
1994	20,171	35.3	16,670	82.6	7,118	42.7	67.6
1995	19,866	35.3	16,269	81.9	7,011	43.1	68.3
1996	19,676	36.2	16,199	82.3	7,123	44.0	68.4
1997	20,020	37.4	16,557	82.7	7,495	45.3	67.7

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Note: College participation rates were calculated using the total population and high school graduates as the bases. The ever-enrolled-in-college participation rate includes 14- to 24-year-olds who either were enrolled in college or had completed one or more years of college. The change in the educational attainment question and the college completion categories from "four or more years of college" to "at least some college" in 1992 caused an increase of approximately 5 percentage points in the proportion of 14- to 24-year-old high school graduates who had enrolled in or who had completed one or more years of college. High school completion rates were calculated using the total population as the base. High school graduates are persons who have completed four or more years of high school for 1977 to 1991. Beginning in 1992, they were persons whose highest degree was a high school diploma (including equivalency) or higher. Data for 1986 and later use a revised tabulation system. Improvements in edits and population estimation procedures caused slight changes in estimates for 1986. Data for 1980 through 1992 use 1980 Census-based estimates, and data for 1993 and later use 1990 Census-based estimates.

Source: U.S. Department of Commerce, Bureau of the Census. *School Enrollment—Social and Economic Characteristics of Students: October 1997.* Current Population Reports, P-20 Series, 1998.

Table 1 - Continued

High School Completion Rates and College Participation Rates, by Race/Ethnicity: 1977 to 1997

Year	18- to 24-Year-Olds						14- to 24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Rate (percent)	Number Completed (thousands)	Completion Rate (percent)	Number Enrolled in College (thousands)	Enrolled-in-College Rate (percent)	Ever-Enrolled-in-College Rate (percent)
AFRICAN AMERICAN							
1977	3,387	21.3	2,286	67.5	721	31.5	46.9
1978	3,452	20.1	2,340	67.8	694	29.7	47.8
1979	3,510	19.8	2,356	67.1	696	29.5	48.4
1980	3,721	19.2	2,592	69.7	715	27.6	45.9
1981	3,778	19.9	2,678	70.9	750	28.0	44.8
1982	3,872	19.8	2,744	70.9	767	28.0	45.5
1983	3,865	19.2	2,740	70.9	741	27.0	45.0
1984	3,862	20.4	2,885	74.7	786	27.2	45.2
1985	3,716	19.8	2,810	75.6	734	26.1	43.8
1986	3,653	22.2	2,795	76.5	812	29.1	47.8
1987	3,603	22.8	2,739	76.0	823	30.0	48.7
1988	3,568	21.1	2,680	75.1	752	28.1	46.6
1989	3,559	23.5	2,708	76.1	835	30.8	49.1
1990	3,520	25.4	2,710	77.0	894	33.0	48.0
1991	3,504	23.6	2,630	75.1	828	31.5	46.0
1992	3,521	25.3	2,625	74.6	886	33.8	53.3
1993	3,666	24.5	2,747	74.9	897	32.7	54.0
1994	3,661	27.3	2,818	77.0	1,001	35.5	59.2
1995	3,625	27.3	2,788	76.9	988	35.4	58.0
1996	3,637	27.0	2,738	75.3	983	35.9	54.6
1997	3,650	29.7	2,726	74.7	1,085	39.8	60.0
HISPANIC [a]							
1977	1,609	17.2	880	54.7	277	31.5	43.8
1978	1,672	15.2	935	55.9	254	27.2	43.2
1979	1,754	16.6	968	55.2	292	30.2	45.7
1980	2,033	16.1	1,099	54.1	327	29.8	47.3
1981	2,052	16.7	1,144	55.8	342	29.9	45.8
1982	2,001	16.8	1,153	57.6	337	29.2	47.3
1983	2,025	17.2	1,110	54.8	349	31.4	48.4
1984	2,018	17.9	1,212	60.1	362	29.9	46.0
1985	2,221	16.9	1,396	62.9	375	26.9	46.7
1986	2,514	18.2	1,507	59.9	458	30.4	45.6
1987	2,592	17.6	1,597	61.6	455	28.5	44.2
1988	2,642	17.0	1,458	55.2	450	30.9	47.1
1989	2,818	16.1	1,576	55.9	453	28.7	43.6
1990	2,749	15.8	1,498	54.5	435	29.0	44.7
1991	2,874	18.0	1,498	52.1	516	34.4	47.6
1992	2,754	21.3	1,578	57.3	586	37.1	55.0
1993	3,663	21.6	2,049	60.9	728	35.5	55.6
1994	3,523	18.8	1,995	56.6	662	33.2	54.3
1995	3,603	20.7	2,112	58.6	745	35.3	55.8
1996	3,510	20.1	2,019	57.5	706	35.0	52.5
1997	3,600	22.4	2,236	62.0	806	36.0	54.3

[a] Hispanics may be of any race.

Table 2

High School Completion Rates and College Participation Rates, by Race/Ethnicity and Gender: 1977 to 1997

Year	18- to 24-Year-Olds: All Persons (thousands)	18- to 24-Year-Olds: Enrolled-in-College Rate (percent)	14- to 24-Year-Olds: High School Graduates: Number Completed (thousands)	14- to 24-Year-Olds: High School Graduates: Completion Rate (percent)	14- to 24-Year-Olds: High School Graduates: Number Enrolled in College (thousands)	14- to 24-Year-Olds: High School Graduates: Enrolled-in-College Rate (percent)	14- to 24-Year-Olds: High School Graduates: Ever-Enrolled-in-College Rate (percent)
ALL RACES							
MEN							
1977	13,218	28.1	10,440	79.0	3,712	35.6	54.2
1978	13,385	27.1	10,614	79.3	3,621	34.1	52.6
1979	13,571	25.8	10,657	78.5	3,508	32.9	52.4
1980	14,107	26.3	11,125	78.9	3,717	33.4	51.4
1981	14,127	27.1	11,052	78.2	3,833	34.7	52.1
1982	14,083	27.2	11,120	79.0	3,837	34.5	53.0
1983	14,003	27.3	10,906	77.9	3,820	35.0	52.7
1984	13,744	28.6	10,914	79.4	3,929	36.0	53.6
1985	13,199	28.4	10,614	80.4	3,749	35.3	54.6
1986	12,921	28.7	10,338	80.0	3,702	35.8	54.4
1987	12,626	30.6	10,030	79.4	3,867	38.6	56.3
1988	12,491	30.2	9,832	78.7	3,770	38.3	56.6
1989	12,325	30.2	9,700	78.7	3,717	38.3	57.2
1990	12,134	32.3	9,778	80.6	3,922	40.1	58.0
1991	12,036	32.9	9,493	78.9	3,954	41.7	59.2
1992	11,965	32.7	9,576	80.0	3,912	40.9	64.1
1993	12,712	33.3	10,142	79.8	4,237	41.8	63.9
1994	12,557	33.1	9,970	79.4	4,152	41.6	64.9
1995	12,351	33.1	9,789	79.3	4,089	41.8	64.2
1996	12,285	34.1	9,815	80.0	4,187	42.6	65.6
1997	12,513	35.0	9,933	79.4	4,374	44.0	64.9
WOMEN							
1977	14,113	24.3	11,569	82.0	3,431	29.7	50.0
1978	14,262	23.7	11,694	82.0	3,373	28.8	50.3
1979	14,403	24.2	11,763	81.7	3,482	29.6	50.8
1980	14,851	24.8	12,287	82.7	3,682	30.0	50.8
1981	14,838	25.2	12,290	82.8	3,741	30.4	51.3
1982	14,763	26.0	12,171	82.4	3,841	31.6	52.4
1983	14,577	25.1	12,082	82.9	3,657	30.3	52.8
1984	14,287	25.6	11,956	83.7	3,662	30.6	52.4
1985	13,923	27.2	11,736	84.3	3,788	32.3	54.0
1986	13,591	27.8	11,430	84.1	3,775	33.0	55.5
1987	13,324	28.7	11,086	83.2	3,826	34.5	56.7
1988	13,242	30.4	11,068	83.6	4,021	36.3	58.3
1989	12,936	31.6	10,758	83.2	4,085	38.0	58.6
1990	12,718	31.8	10,533	82.8	4,042	38.4	59.8
1991	12,536	33.6	10,391	82.9	4,218	41.0	62.1
1992	12,313	36.0	10,344	84.0	4,429	42.8	66.9
1993	12,810	34.3	10,702	83.5	4,393	41.0	66.6
1994	12,696	36.0	10,611	83.6	4,576	43.1	68.7
1995	12,548	35.5	10,338	82.4	4,452	43.1	69.8
1996	12,386	37.0	10,317	83.3	4,582	44.4	68.6
1997	12,460	38.8	10,403	83.5	4,820	46.4	69.6

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Note: College participation rates were calculated using the total population and high school graduates as the bases. The ever-enrolled-in-college participation rate includes 14- to 24-year-olds who either were enrolled in college or had completed one or more years of college. The change in the educational attainment question and the college completion categories from "four or more years of college" to "at least some college" in 1992 caused an increase of approximately 5 percentage points in the proportion of 14- to 24-year-old high school graduates who had enrolled in or who had completed one or more years of college. High school completion rates were calculated using the total population as the base. High school graduates are persons who have completed four or more years of high school for 1977 to 1991. Beginning in 1992, they were persons whose highest degree was a high school diploma (including equivalency) or higher. Data for 1986 and later use a revised tabulation system. Improvements in edits and population estimation procedures caused slight changes in estimates for 1986. Data for 1980 through 1992 use 1980 Census-based estimates, and data for 1993 and later use 1990 Census-based estimates.

Source: U.S. Department of Commerce, Bureau of the Census. *School Enrollment–Social and Economic Characteristics of Students: October 1997.* Current Population Reports, P-20 Series, 1998.

Table 2 - Continued

High School Completion Rates and College Participation Rates, by Race/Ethnicity and Gender: 1977 to 1997

Year	18- to 24-Year-Olds: All Persons (thousands)	18- to 24-Year-Olds: Enrolled-in-College Rate (percent)	14- to 24-Year-Olds: High School Graduates: Number Completed (thousands)	14- to 24-Year-Olds: High School Graduates: Completion Rate (percent)	14- to 24-Year-Olds: High School Graduates: Number Enrolled in College (thousands)	14- to 24-Year-Olds: High School Graduates: Enrolled-in-College Rate (percent)	14- to 24-Year-Olds: High School Graduates: Ever-Enrolled-in-College Rate (percent)
WHITE							
MEN							
1977	11,445	28.7	9,263	80.9	3,286	35.5	54.5
1978	11,572	27.6	9,438	81.6	3,195	33.9	52.5
1979	11,721	26.5	9,457	80.7	3,104	32.8	52.7
1980	12,011	27.3	9,686	80.6	3,275	33.8	51.8
1981	12,040	27.7	9,619	79.9	3,340	34.7	52.8
1982	11,874	27.9	9,611	80.9	3,308	34.4	53.2
1983	11,787	28.3	9,411	79.8	3,335	35.4	53.5
1984	11,521	29.6	9,348	81.1	3,406	36.4	54.2
1985	11,108	29.3	9,077	81.7	3,254	35.8	55.5
1986	10,814	29.3	8,780	81.2	3,168	36.1	55.1
1987	10,549	31.2	8,498	80.6	3,289	38.7	56.7
1988	10,380	31.4	8,268	79.7	3,260	39.4	57.9
1989	10,240	31.5	8,177	79.9	3,223	39.4	58.5
1990	10,053	32.7	8,157	81.1	3,292	40.3	58.7
1991	9,896	33.0	7,843	79.3	3,270	41.9	59.9
1992	9,744	33.8	7,911	81.2	3,291	41.6	65.8
1993	10,294	34.0	8,338	81.0	3,498	42.0	65.1
1994	10,123	33.6	8,168	80.7	3,406	41.7	65.4
1995	9,980	34.0	8,001	80.2	3,398	42.5	65.3
1996	9,897	34.5	8,000	80.8	3,419	42.7	66.0
1997	10,173	35.7	8,204	80.6	3,633	44.3	65.3
WOMEN							
1977	11,985	24.4	10,029	83.7	2,923	29.1	50.0
1978	12,078	23.9	10,088	83.5	2,882	28.6	50.3
1979	12,174	24.8	10,157	83.4	3,015	29.7	50.8
1980	12,471	25.2	10,528	84.4	3,147	29.9	50.9
1981	12,446	25.8	10,504	84.4	3,208	30.5	51.6
1982	12,332	26.6	10,333	83.8	3,285	31.8	52.9
1983	12,112	25.8	10,233	84.5	3,129	30.6	53.4
1984	11,826	26.4	10,026	84.8	3,120	31.1	53.4
1985	11,524	28.2	9,840	85.4	3,247	33.0	55.2
1986	11,205	28.0	9,509	84.9	3,139	33.0	55.8
1987	10,944	29.2	9,189	84.0	3,192	34.7	57.5
1988	10,881	31.2	9,223	84.8	3,399	36.9	59.2
1989	10,586	32.2	8,913	84.2	3,409	38.2	59.2
1990	10,340	32.3	8,666	83.8	3,344	38.6	61.4
1991	10,119	35.0	8,481	83.8	3,544	42.1	64.5
1992	9,928	36.5	8,468	85.3	3,625	42.8	68.1
1993	10,199	35.1	8,651	84.8	3,576	41.3	67.9
1994	10,048	37.0	8,503	84.6	3,714	43.7	69.7
1995	9,886	36.6	8,271	83.7	3,615	43.7	71.3
1996	9,778	37.9	8,200	83.9	3,705	45.2	70.7
1997	9,847	39.6	8,352	84.8	3,863	46.3	70.1

Continued on next page

Table 2 - Continued

High School Completion Rates and College Participation Rates, by Race/Ethnicity and Gender: 1977 to 1997

Year	18- to 24-Year-Olds: All Persons (thousands)	18- to 24-Year-Olds: Enrolled-in-College Rate (percent)	High School Graduates: Number Completed (thousands)	High School Graduates: Completion Rate (percent)	High School Graduates: Number Enrolled in College (thousands)	14- to 24-Year-Olds: Enrolled-in-College Rate (percent)	14- to 24-Year-Olds: Ever-Enrolled-in-College Rate (percent)
AFRICAN AMERICAN							
MEN							
1977	1,528	20.2	970	63.5	309	31.9	47.6
1978	1,554	19.6	956	61.5	305	31.9	49.3
1979	1,577	19.3	973	61.7	304	31.2	46.7
1980	1,690	17.3	1,115	66.0	293	26.3	44.1
1981	1,730	18.8	1,154	66.7	325	28.2	42.3
1982	1,786	18.5	1,171	65.6	331	28.3	44.5
1983	1,807	18.3	1,202	66.5	331	27.5	43.6
1984	1,811	20.3	1,272	70.2	367	28.9	45.2
1985	1,720	20.1	1,244	72.3	345	27.7	43.6
1986	1,687	20.7	1,220	72.3	349	28.6	44.4
1987	1,666	22.6	1,188	71.3	377	31.7	48.3
1988	1,653	18.0	1,189	71.9	297	25.0	42.8
1989	1,654	19.6	1,195	72.2	324	27.1	45.8
1990	1,634	26.1	1,240	75.9	426	34.4	48.9
1991	1,635	23.1	1,174	71.8	378	32.2	47.3
1992	1,676	21.2	1,211	72.3	356	29.7	49.4
1993	1,703	22.7	1,240	72.8	387	31.2	50.1
1994	1,733	25.4	1,277	73.7	440	34.5	57.9
1995	1,660	25.9	1,247	75.1	430	34.4	56.2
1996	1,682	25.1	1,199	71.3	422	35.2	53.7
1997	1,701	25.0	1,214	71.4	425	35.0	56.3
WOMEN							
1977	1,859	22.2	1,317	70.8	413	31.4	46.2
1978	1,897	20.6	1,384	73.0	390	28.2	46.7
1979	1,934	20.3	1,383	71.5	392	28.3	49.8
1980	2,031	20.8	1,475	72.6	422	28.6	47.4
1981	2,049	20.7	1,526	74.5	424	27.8	46.6
1982	2,086	20.9	1,572	75.4	436	27.7	46.3
1983	2,058	20.0	1,539	74.8	411	26.7	46.3
1984	2,052	20.4	1,613	78.6	419	26.0	45.1
1985	1,996	19.5	1,565	78.4	389	24.9	44.0
1986	1,966	23.5	1,576	80.1	462	29.4	50.4
1987	1,937	23.0	1,550	80.0	445	28.7	48.9
1988	1,915	23.8	1,492	77.9	455	30.5	49.6
1989	1,905	26.8	1,511	79.3	511	33.8	51.8
1990	1,886	24.8	1,468	77.8	467	31.8	47.3
1991	1,869	24.1	1,455	77.8	460	30.9	45.2
1992	1,845	28.8	1,417	76.8	531	37.5	56.6
1993	1,965	26.0	1,508	76.7	511	33.9	57.2
1994	1,928	29.1	1,542	80.0	561	36.4	60.3
1995	1,965	28.4	1,541	78.4	558	36.2	59.5
1996	1,956	28.7	1,539	78.7	561	36.4	55.3
1997	1,949	33.8	1,511	77.5	659	43.6	63.0

Continued on next page

Table 2 - Continued

High School Completion Rates and College Participation Rates, by Race/Ethnicity and Gender: 1977 to 1997

Year	18- to 24-Year-Olds: All Persons (thousands)	18- to 24-Year-Olds: Enrolled-in-College Rate (percent)	High School Graduates: Number Completed (thousands)	High School Graduates: Completion Rate (percent)	High School Graduates: Number Enrolled in College (thousands)	High School Graduates: Enrolled-in-College Rate (percent)	14- to 24-Year-Olds: Ever-Enrolled-in-College Rate (percent)
HISPANIC [a]							
MEN							
1977	754	18.4	396	52.5	139	35.1	46.5
1978	781	16.1	420	53.8	126	30.0	46.3
1979	837	18.3	454	54.2	153	33.7	49.5
1980	1,012	15.8	518	51.2	160	30.9	49.5
1981	988	16.6	498	50.4	164	32.9	48.6
1982	944	14.9	519	55.0	141	27.2	44.8
1983	968	15.7	476	49.2	152	31.9	47.4
1984	956	16.1	549	57.4	154	28.1	45.7
1985	1,132	14.8	659	58.2	168	25.5	44.9
1986	1,339	17.4	769	57.4	233	30.3	44.4
1987	1,337	18.5	795	59.5	247	31.1	45.1
1988	1,375	16.6	724	52.7	228	31.5	48.4
1989	1,439	14.7	756	52.5	211	27.9	42.7
1990	1,403	15.3	753	53.7	214	28.4	46.5
1991	1,503	14.0	719	47.8	211	29.3	42.2
1992	1,384	17.8	720	52.0	247	34.3	52.2
1993	1,710	19.8	1,005	58.8	338	33.6	51.2
1994	1,896	16.5	1,021	53.8	312	30.6	52.7
1995	1,907	18.7	1,106	58.0	356	32.2	52.3
1996	1,815	16.5	994	54.8	300	30.2	48.8
1997	1,937	19.2	1,140	58.9	371	32.5	49.2
WOMEN							
1977	855	16.3	483	56.5	139	28.8	41.6
1978	891	14.4	516	57.9	128	24.8	40.0
1979	917	15.3	516	56.3	140	27.1	42.3
1980	1,021	16.2	579	56.7	165	28.5	45.4
1981	1,064	16.7	646	60.7	178	27.6	43.4
1982	1,056	18.6	634	60.0	196	30.9	49.2
1983	1,057	18.7	634	60.0	198	31.2	49.7
1984	1,061	19.5	661	62.3	207	31.3	46.6
1985	1,091	18.8	734	67.3	205	27.9	48.0
1986	1,175	19.2	739	62.9	226	30.6	46.8
1987	1,256	16.6	801	63.8	208	26.0	43.2
1988	1,267	17.7	736	58.1	224	30.4	46.0
1989	1,377	17.7	823	59.8	244	29.6	44.5
1990	1,346	16.4	745	55.3	221	29.7	43.0
1991	1,372	22.2	780	56.9	305	39.1	52.4
1992	1,369	24.8	860	62.8	339	39.4	57.4
1993	1,652	23.6	1,045	63.3	390	37.3	60.1
1994	1,628	21.5	973	59.8	350	36.0	55.9
1995	1,696	22.9	1,011	59.6	389	38.4	59.6
1996	1,694	24.0	1,026	60.6	406	39.6	58.0
1997	1,669	26.1	1,097	65.7	436	39.7	59.6

[a] Hispanics may be of any race.

Table 3

Educational Attainment Rates for Persons 25 to 29 Years Old and Persons 25 Years Old and Over, by Race/Ethnicity and Gender: 1977 to 1997
(percent)

Year and Age	ALL RACES			WHITE			AFRICAN AMERICAN			HISPANIC [a]		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
25 TO 29 YEARS OLD – Completed Four or More Years of High School												
1977	85.4	86.6	84.2	86.8	87.6	86.0	74.4	77.5	72.0	58.1	62.1	54.8
1978	85.3	86.0	84.6	86.3	86.8	85.8	77.3	78.5	76.3	56.6	58.5	54.7
1979	85.6	86.3	84.9	87.0	87.7	86.4	74.8	73.9	75.4	57.0	55.5	58.5
1980	85.4	85.4	85.5	86.9	86.8	87.0	76.6	74.8	78.1	58.6	58.3	58.8
1981	86.3	86.5	86.1	87.6	87.6	87.6	77.3	78.4	76.4	59.8	59.1	60.4
1982	86.2	86.3	86.1	86.9	87.0	86.8	80.9	80.5	81.3	60.9	60.7	61.2
1983	86.0	86.0	86.0	86.9	86.9	86.9	79.4	78.9	79.8	58.3	57.8	58.9
1984	85.9	85.6	86.3	86.9	86.8	87.0	78.9	75.9	81.5	58.6	56.8	60.2
1985	86.1	85.9	86.4	86.8	86.4	87.3	80.6	80.8	80.4	60.9	58.6	63.1
1986	86.1	85.9	86.4	86.5	85.6	87.4	83.4	86.5	80.6	59.1	58.2	60.0
1987	86.0	85.5	86.4	86.3	85.6	87.0	83.3	84.8	82.1	59.8	58.6	61.0
1988	85.7	84.4	87.0	86.5	84.8	88.2	80.7	80.6	80.7	62.0	59.4	65.0
1989	85.5	84.4	86.5	86.0	84.8	87.1	82.2	80.6	83.6	61.0	61.0	61.0
1990	85.7	84.4	87.0	86.3	84.6	88.1	81.7	81.5	81.8	58.2	56.6	59.9
1991	85.4	84.9	85.8	85.8	85.1	86.6	81.7	83.5	80.1	56.7	56.4	57.1
1992	86.3	86.1	86.5	87.0	86.5	87.6	80.9	82.5	79.5	60.9	61.1	60.6
1993	86.7	86.0	87.4	87.3	86.1	88.5	82.8	85.0	80.9	60.9	58.3	64.0
1994	86.1	84.5	87.6	86.5	84.7	88.3	84.1	82.9	85.0	60.3	58.0	63.0
1995	86.8	86.3	87.4	87.4	86.6	88.2	86.5	88.1	85.1	57.1	55.7	58.7
1996	87.3	86.5	88.1	87.5	86.3	88.8	85.6	87.2	84.2	61.1	59.7	62.9
1997	87.4	85.8	88.9	87.6	85.8	89.4	86.2	85.2	87.1	61.8	59.2	64.9
25 TO 29 YEARS OLD – Completed Four or More Years of College												
1977	24.0	27.0	21.1	25.3	28.5	22.1	12.6	12.8	12.4	6.7	7.2	6.4
1978	23.3	26.0	20.6	24.5	27.6	21.4	11.8	10.7	12.6	9.6	9.6	9.7
1979	23.1	25.6	20.5	24.3	27.1	21.5	12.4	13.3	11.7	7.3	7.9	6.8
1980	22.5	24.0	21.0	23.7	25.5	22.0	11.6	10.5	12.5	7.7	8.4	6.9
1981	21.3	23.1	19.6	22.4	24.3	20.5	11.6	12.1	11.1	7.5	8.6	6.5
1982	21.7	23.3	20.2	22.7	24.5	20.9	12.6	11.8	13.2	9.7	10.7	8.7
1983	22.5	23.9	21.1	23.4	25.0	21.8	12.9	13.1	12.8	10.4	9.6	11.1
1984	21.9	23.2	20.7	23.1	24.3	21.9	11.6	12.9	10.5	10.6	9.6	11.6
1985	22.2	23.1	21.3	23.2	24.2	22.2	11.5	10.3	12.6	11.1	10.9	11.2
1986	22.4	22.9	21.9	23.5	24.1	22.9	11.8	10.1	13.3	9.0	8.9	9.1
1987	22.0	22.3	21.7	23.0	23.3	22.8	11.4	11.6	11.1	8.7	9.2	8.2
1988	22.5	23.2	21.9	23.5	24.0	22.9	12.2	12.6	11.9	11.4	12.1	10.6
1989	23.4	23.9	22.9	24.4	24.8	24.0	12.7	12.0	13.3	10.1	9.6	10.6
1990	23.2	23.7	22.8	24.2	24.2	24.3	13.4	15.1	11.9	8.1	7.3	9.1
1991	23.2	23.0	23.4	24.6	24.1	25.0	11.0	11.5	10.6	9.2	8.1	10.4
1992	23.6	23.2	24.0	25.0	24.2	25.7	11.3	12.0	10.6	9.5	8.8	10.3
1993	23.7	23.4	23.9	24.7	24.4	25.1	13.2	12.6	13.8	8.3	7.1	9.8
1994	23.3	22.5	24.0	24.2	23.6	24.8	13.7	11.7	15.4	8.0	6.6	9.8
1995	24.7	24.5	24.9	26.0	25.4	26.6	15.3	17.2	13.6	8.9	7.8	10.1
1996	27.1	26.1	28.2	28.1	27.2	29.1	14.6	12.4	16.4	10.0	10.2	9.8
1997	27.8	26.3	29.3	28.9	27.2	30.7	14.4	12.1	16.4	11.0	9.6	10.1

Continued on next page

[a] Hispanics may be of any race.

Note: High school completion rates were calculated using the total population as the base. High school graduates are persons who have completed four or more years of high school for 1977 to 1991. Beginning in 1992, "persons with four or more years of college" was changed to "persons with a bachelor's degree or higher." Data for 1986 and later use a revised tabulation system. Improvements in edits and population estimation procedures caused slight changes in estimates for 1986. Data for 1980 through 1992 use 1980 Census-based estimates, and data for 1993 and later use 1990 Census-based estimates.

Source: U.S. Department of Commerce, Bureau of the Census. *Educational Attainment in the United States.* Current Population Reports, P-20 Series, 1999.

Educational Attainment Rates for Persons 25 to 29 Years Old and Persons 25 Years Old and Over, by Race/Ethnicity and Gender: 1977 to 1997 (percent)

Year and Age	ALL RACES			WHITE			AFRICAN AMERICAN			HISPANIC[a]		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
25 YEARS OLD AND OVER – Completed Four or More Years of High School												
1977	64.9	65.6	64.4	67.0	67.5	66.5	45.5	45.6	45.4	39.6	42.3	37.2
1978	65.9	66.8	65.2	67.9	68.6	67.2	47.6	47.9	47.3	40.8	42.2	39.6
1979	67.7	68.4	67.1	69.7	70.3	69.2	49.4	49.2	49.5	42.0	42.3	41.7
1980	85.4	85.4	85.5	86.9	86.8	87.0	76.6	74.8	78.1	58.6	58.3	58.8
1981	69.7	70.3	69.1	71.6	72.1	71.2	52.9	53.2	52.6	44.5	45.5	43.6
1982	71.0	71.7	70.3	72.8	73.4	72.3	54.9	55.7	54.3	45.9	48.1	44.1
1983	72.1	72.7	71.5	73.8	74.4	73.3	56.8	56.5	57.1	46.2	48.6	44.2
1984	73.3	73.7	73.0	75.0	75.4	74.6	58.5	57.1	59.7	47.1	48.6	45.7
1985	73.9	74.4	73.5	75.5	76.0	75.1	59.8	58.4	60.8	47.9	48.5	47.4
1986	74.7	75.1	74.4	76.2	76.5	75.9	62.3	61.5	63.0	48.5	49.2	47.8
1987	75.6	76.0	75.3	77.0	77.3	76.7	63.4	63.0	63.7	50.9	51.8	50.0
1988	76.2	76.4	76.0	77.7	77.7	77.6	63.5	63.7	63.4	51.0	52.0	50.0
1989	76.9	77.2	76.6	78.4	78.6	78.2	64.6	64.2	65.0	50.9	51.0	50.7
1990	77.6	77.7	77.5	79.1	79.1	79.0	66.2	65.8	66.5	50.8	50.3	51.3
1991	78.4	78.5	78.3	79.9	79.8	79.9	66.7	66.7	66.7	51.3	51.4	51.2
1992	79.4	79.7	79.2	80.9	81.1	80.7	67.7	67.0	68.2	52.6	53.7	51.5
1993	80.2	80.5	80.0	81.5	81.8	81.3	70.4	69.6	71.1	53.1	52.9	53.2
1994	80.9	81.0	80.7	82.0	82.1	81.9	72.9	71.7	73.8	53.3	53.4	53.2
1995	81.7	81.7	81.6	83.0	83.0	83.0	73.8	73.4	74.1	53.4	52.9	53.8
1996	81.7	81.9	81.6	82.8	82.7	82.8	74.3	74.3	74.2	53.1	53.0	53.3
1997	82.1	82.0	82.2	83.0	82.9	83.2	74.9	73.5	76.0	54.7	54.9	54.6
25 YEARS OLD AND OVER – Completed Four or More Years of College												
1977	15.4	19.2	12.0	16.1	20.2	12.4	7.2	7.0	7.4	6.2	8.1	4.4
1978	15.7	19.7	12.2	16.4	20.7	12.6	7.2	7.3	7.1	7.0	8.6	5.7
1979	16.4	20.4	12.9	17.2	21.4	13.3	7.9	8.3	7.5	6.7	8.2	5.3
1980	17.0	20.9	13.6	17.8	22.1	14.0	7.9	7.7	8.1	7.9	9.7	6.2
1981	17.1	21.1	13.4	17.8	22.2	13.8	8.2	8.2	8.2	7.7	9.7	5.9
1982	17.7	21.9	14.0	18.5	23.0	14.4	8.8	9.1	8.5	7.8	9.6	6.2
1983	18.8	23.0	15.1	19.5	24.0	15.4	9.5	10.0	9.2	7.9	9.2	6.8
1984	19.1	22.9	15.7	19.8	23.9	16.0	10.4	10.4	10.4	8.2	9.5	7.0
1985	19.4	23.1	16.0	20.0	24.0	16.3	11.1	11.2	11.0	8.5	9.7	7.3
1986	19.4	23.2	16.1	20.1	24.1	16.4	10.9	11.2	10.7	8.4	9.5	7.4
1987	19.9	23.6	16.5	20.5	24.5	16.9	10.7	11.0	10.4	8.6	9.7	7.5
1988	20.3	24.0	17.0	20.9	25.0	17.3	11.2	11.1	11.4	10.1	12.3	8.1
1989	21.1	24.5	18.1	21.8	25.4	18.5	11.8	11.7	11.9	9.9	11.0	8.8
1990	21.3	24.4	18.4	22.0	25.3	19.0	11.3	11.9	10.8	9.2	9.8	8.7
1991	21.4	24.3	18.8	22.2	25.4	19.3	11.5	11.4	11.6	9.7	10.0	9.4
1992	21.4	24.3	18.6	22.1	25.2	19.1	11.9	11.9	12.0	9.3	10.2	8.5
1993	21.9	24.8	19.2	22.6	25.7	19.7	12.2	11.9	12.4	9.0	9.5	8.5
1994	22.2	25.1	19.6	22.9	26.1	20.0	12.9	12.8	13.0	9.1	9.6	8.6
1995	23.0	26.0	20.2	24.0	27.2	21.0	13.2	13.6	12.9	9.3	10.1	8.4
1996	23.6	26.0	21.4	24.3	26.9	21.8	13.6	12.4	14.6	9.3	10.3	8.3
1997	23.9	26.2	21.7	24.6	27.0	22.3	13.3	12.5	13.9	10.3	10.6	10.1

[a] Hispanics may be of any race.

Table 4

Total Enrollment in Higher Education, by Type of Institution and Race/Ethnicity: Selected Years, Fall 1988 to Fall 1997

(Numbers in Thousands)

	1988	1991	1992	1993	1994	1995	1996	1997	Percent Change 1988–97	Percent Change 1993–97	Percent Change 1996–97
ALL INSTITUTIONS	13,043	14,359	14,486	14,305	14,279	14,262	14,368	14,502	11.2	1.4	0.9
White (non-Hispanic)	10,283	10,990	10,875	10,600	10,427	10,311	10,264	10,266	-0.2	-3.1	0.0
Total Minority	2,399	2,953	3,164	3,248	3,396	3,496	3,637	3,771	57.2	16.1	3.7
African American (non-Hispanic)	1,130	1,335	1,393	1,413	1,449	1,474	1,506	1,551	37.3	9.8	3.0
Hispanic	680	867	955	989	1,046	1,093	1,166	1,218	79.2	23.2	4.5
Asian American[a]	497	637	697	724	774	797	828	859	73.0	18.6	3.7
American Indian[b]	93	114	119	122	127	131	138	142	54.0	17.1	3.6
Nonresident Alien	361	416	448	457	457	454	466	465	28.7	1.7	-0.3
FOUR-YEAR INSTITUTIONS	8,175	8,707	8,764	8,739	8,749	8,769	8,804	8,897	8.8	1.8	1.1
White (non-Hispanic)	6,582	6,791	6,744	6,639	6,565	6,517	6,483	6,496	-1.3	-2.2	0.2
Total Minority	1,292	1,573	1,663	1,734	1,819	1,886	1,947	2,016	56.1	16.3	3.6
African American (non-Hispanic)	656	758	791	814	834	852	870	896	36.6	10.2	3.1
Hispanic	296	383	410	432	463	485	509	530	79.0	22.7	4.2
Asian American[a]	297	381	407	429	462	482	501	519	74.3	20.7	3.5
American Indian[b]	42	51	55	59	61	66	67	72	69.9	22.3	6.2
Nonresident Alien	302	343	357	366	365	366	374	384	27.5	5.0	2.7
TWO-YEAR INSTITUTIONS	4,868	5,652	5,722	5,566	5,530	5,493	5,563	5,606	15.1	0.7	0.8
White (non-Hispanic)	3,702	4,199	4,131	3,961	3,862	3,794	3,781	3,770	1.9	-4.8	-0.3
Total Minority	1,107	1,381	1,500	1,514	1,577	1,610	1,691	1,755	58.5	15.9	3.8
African American (non-Hispanic)	473	578	602	599	615	621	636	655	38.3	9.3	2.9
Hispanic	384	484	545	557	583	608	657	689	79.4	23.7	4.7
Asian American[a]	199	256	289	295	313	315	327	341	71.0	15.5	4.2
American Indian[b]	50	63	64	63	66	66	70	71	40.8	12.3	1.0
Nonresident Alien	60	74	91	91	91	88	92	81	35.5	-11.5	-12.2

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaska Natives.

Note: Due to rounding, details may not add to totals. Percent changes for 1996 to 1997 were calculated prior to rounding. Data for fall 1996 have been revised from previously published figures.

Source: U.S. Department of Education, National Center for Education Statistics. *Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1982 through Fall 1992.* Washington, DC: January 1994.
U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

Table 5

Total Enrollment in Higher Education, by Gender, Race/Ethnicity, and Control of Institution: Selected Years, Fall 1988 to Fall 1997

(Numbers in Thousands)

	1988	1991	1992	1993	1994	1995	1996	1997	Percent Change 1988–97	Percent Change 1993–97	Percent Change 1996–97
MEN	5,998	6,502	6,524	6,428	6,372	6,343	6,353	6,396	6.6	-0.5	0.7
White (non-Hispanic)	4,712	4,962	4,884	4,757	4,651	4,594	4,552	4,549	-3.5	-4.3	-0.1
Total Minority	1,051	1,281	1,366	1,395	1,452	1,484	1,533	1,582	50.5	13.1	3.2
African American (non-Hispanic)	443	517	537	540	550	556	564	580	31.0	6.6	2.8
Hispanic	310	391	428	441	464	480	507	526	69.4	19.2	3.8
Asian American[a]	259	325	351	363	385	393	406	418	61.2	15.0	3.0
American Indian[b]	39	48	50	51	53	55	57	59	51.0	15.3	3.3
Nonresident Alien	235	259	273	276	270	264	267	265	12.6	-3.1	-0.9
WOMEN	7,045	7,857	7,963	7,878	7,907	7,919	8,015	8,106	15.1	2.9	1.1
White (non-Hispanic)	5,572	6,028	5,991	5,849	5,776	5,717	5,712	5,717	2.6	-2.2	0.1
Total Minority	1,347	1,672	1,797	1,846	1,944	2,012	2,104	2,189	62.5	18.4	4.0
African American (non-Hispanic)	786	818	856	866	899	918	941	971	41.4	11.8	3.2
Hispanic	370	476	527	548	582	614	660	693	87.4	26.5	5.0
Asian American[a]	238	312	345	361	389	404	423	441	85.9	22.2	4.5
American Indian[b]	53	66	69	71	74	76	80	83	56.2	18.3	3.8
Nonresident Alien	126	157	175	184	186	190	199	200	58.9	8.9	0.5
PUBLIC	10,156	11,310	11,385	11,189	11,134	11,092	11,120	11,196	10.2	0.1	0.7
White (non-Hispanic)	7,964	8,622	8,493	8,227	8,056	7,945	7,872	7,858	-1.3	-4.5	-0.2
Total Minority	1,955	2,411	2,591	2,657	2,776	2,850	2,945	3,041	55.6	83.4	3.3
African American (non-Hispanic)	881	1,053	1,100	1,114	1,145	1,161	1,177	1,205	36.8	8.2	2.4
Hispanic	587	742	822	851	899	937	991	1,032	75.8	21.2	4.1
Asian American[a]	406	516	566	586	622	638	658	680	67.7	16.1	3.4
American Indian[b]	81	100	103	106	111	114	119	124	52.4	16.2	4.1
Nonresident Alien	238	275	300	304	301	297	304	297	25.0	-2.3	-2.1
INDEPENDENT	2,887	3,049	3,102	3,116	3,145	3,169	3,247	3,306	14.5	6.1	1.8
White (non-Hispanic)	2,319	2,368	2,382	2,373	2,371	2,366	2,392	2,408	3.8	1.5	0.7
Total Minority	444	542	572	589	620	647	693	730	64.4	23.9	5.4
African American (non-Hispanic)	249	282	292	298	304	313	328	346	39.1	15.8	5.4
Hispanic	93	125	133	138	147	157	175	187	100.7	35.9	6.6
Asian American[a]	91	121	131	138	152	159	170	179	96.5	29.4	5.0
American Indian[b]	12	14	16	15	17	17	19	19	63.8	23.1	0.2
Nonresident Alien	123	141	148	153	155	157	162	168	36.0	9.8	3.2

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaska Natives.

Note: Due to rounding, details may not add to totals. Percent changes for 1996 to 1997 were calculated prior to rounding. Data for fall 1996 have been revised from previously published figures.

Source: U.S. Department of Education, National Center for Education Statistics. *Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1982 through Fall 1992.* Washington, DC: January 1994.
U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

Table 6

Undergraduate, Graduate, and Professional School Enrollment in Higher Education, by Race/Ethnicity: Selected Years, Fall 1988 to Fall 1997

(Numbers in Thousands)

	1988	1991	1992	1993	1994	1995	1996	1997	Percent Change 1988–97	Percent Change 1993–97	Percent Change 1996–97
UNDERGRADUATE TOTAL	11,304	12,439	12,537	12,323	12,263	12,232	12,327	12,451	10.1	1.0	1.0
White (non-Hispanic)	8,907	9,508	9,387	9,100	8,916	8,806	8,770	8,784	-1.4	-3.5	0.2
Total Minority	2,192	2,698	2,892	2,955	3,077	3,159	3,282	3,399	55.0	15.0	3.5
African American (non-Hispanic)	1,039	1,229	1,280	1,290	1,317	1,334	1,359	1,398	34.6	8.3	2.9
Hispanic	631	804	888	918	968	1,012	1,079	1,126	78.4	22.6	4.3
Asian American[a]	437	559	613	634	674	692	718	744	70.3	17.3	3.6
American Indian[b]	86	106	111	113	117	121	127	131	52.3	16.1	3.4
Nonresident Alien	205	234	258	268	269	268	275	268	30.8	0.0	-2.6
GRADUATE TOTAL	1,472	1,639	1,669	1,688	1,721	1,732	1,742	1,753	19.1	3.8	0.6
White (non-Hispanic)	1,153	1,258	1,267	1,274	1,287	1,282	1,273	1,262	9.4	-0.9	-0.8
Total Minority	167	205	218	232	255	271	286	302	80.8	29.9	5.6
African American (non-Hispanic)	77	89	94	102	111	119	125	132	72.1	28.8	4.9
Hispanic	40	51	55	58	64	68	73	79	99.3	35.9	8.1
Asian American[a]	46	58	62	65	73	76	79	83	80.7	26.7	4.4
American Indian[b]	6	7	7	7	8	8	9	9	67.3	28.3	5.4
Nonresident Alien	151	177	184	182	180	180	183	189	25.1	4.0	3.3
PROFESSIONAL SCHOOL TOTAL	267	281	281	292	295	298	277	298	11.7	2.0	7.8
White (non-Hispanic)	223	224	221	226	224	223	205	220	-1.3	-2.4	7.6
Total Minority	39	50	54	60	64	67	65	70	80.1	18.1	8.9
African American (non-Hispanic)	14	17	18	20	21	21	19	21	49.4	5.8	10.1
Hispanic	9	11	12	13	13	14	13	14	49.1	8.3	6.0
Asian American[a]	14	21	23	25	28	30	30	33	128.5	31.6	9.0
American Indian[b]	1	1	1	2	2	2	2	2	107.5	34.2	13.1
Nonresident Alien	5	6	6	7	7	7	7	7	58.7	8.1	2.6

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaska Natives.

Note: Due to rounding, details may not add to totals. Percent changes for 1996 to 1997 were calculated prior to rounding. Data for fall 1996 have been revised from previously published figures.

Source: U.S. Department of Education, National Center for Education Statistics. *Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1982 through Fall 1992.* Washington, DC: January 1994.
U.S. Department of Education, National Center for Education Statistics. *Enrollment in Higher Education.* Washington, DC: 1999.

Table 7

Enrollment at Historically Black Colleges and Universities, by Race/Ethnicity: Fall 1987 to Fall 1997

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Percent Change 1987–97	Percent Change 1996–97
Number of HBCUs[a]	104	106	104	104	102	107	107	107	107	106	106		
Total Enrollment	217,670	230,758	238,946	248,697	258,509	277,261	284,247	280,915	284,951	277,974	273,752	25.8	-1.5
African American[b]	182,020	192,848	199,974	207,547	213,904	224,946	230,078	229,046	230,279	225,886	223,895	23.0	-0.9
White[c]	23,227	25,767	26,962	29,601	31,085	36,203	37,375	36,045	38,936	37,013	35,224	51.7	-4.8
Hispanic	1,590	1,746	1,859	1,797	2,131	4,755	5,021	5,186	5,105	5,593	2,421	52.3	-3.9
Asian American[d]	1,187	1,473	1,568	1,724	2,009	2,151	2,357	2,374	2,251	2,520	5,671	377.8	1.4
American Indian[e]	449	254	307	338	388	447	518	586	598	622	748	66.6	20.3
Nonresident Alien	8,897	8,671	8,273	7,690	7,489	7,360	6,757	6,262	5,985	6,340	5,793	-34.9	-8.6

[a] These figures represent the number of institutions reporting their enrollments each year.

[b] African American (non-Hispanic).

[c] White (non-Hispanic).

[d] Asian American includes Pacific Islanders.

[e] American Indian includes Alaska Natives.

Note: Detail does not add to total because race/ethnicity unknown data are included in the total.

Source: National Association for Equal Opportunity Research Institute. Annual Fall Enrollment Surveys, 1987–1997.

Table 8

African-American Enrollment at Historically Black Colleges and Universities, by Control of Institution and Gender: Fall 1987 to Fall 1997

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Percent Change 1987–97	Percent Change 1996–97
NUMBER OF HBCUs	104	106	104	104	102	107	107	107	107	106	106		
ALL HBCUs	182,020	192,848	199,974	207,547	213,904	224,946	230,078	229,046	230,279	225,886	223,895	23.0	-0.9
Men	74,447	77,741	79,462	82,587	85,713	90,831	92,397	91,667	91,546	88,896	87,097	17.0	-2.0
Women	107,573	115,107	120,512	124,960	128,191	134,115	137,681	137,379	138,733	136,990	136,798	27.2	-0.1
PUBLIC HBCUs	124,749	132,067	137,190	143,763	150,707	156,623	159,581	158,888	159,492	156,111	152,362	22.1	-2.4
Men	51,177	53,206	54,400	57,070	60,147	63,389	63,890	63,702	63,607	61,484	59,083	15.4	-3.9
Women	73,572	78,861	82,790	86,693	90,560	93,234	95,691	95,186	95,885	94,627	93,279	26.8	-1.4
INDEPENDENT HBCUs	57,271	60,781	62,784	63,784	63,197	68,323	70,497	70,158	70,787	69,775	71,533	24.9	2.5
Men	23,270	24,535	25,062	25,517	25,566	27,442	28,507	27,965	27,939	27,412	28,014	20.4	2.2
Women	34,001	36,246	37,722	38,267	37,631	40,881	41,990	42,193	42,848	42,363	43,519	28.0	2.7

Source: National Association for Equal Opportunity Research Institute. Annual Fall Enrollment Surveys, 1987–1997.

Table 9

NCAA Division I Graduation Rates, by Type of Institution, Race/Ethnicity, and Gender: 1992 to 1997

	1992[a] (percent)	1993[b] (percent)	1994[c] (percent)	1995[d] (percent)	1996[e] (percent)	1997[f] (percent)	Percentage Change 1992–97	Percentage Change 1996–97
ALL INSTITUTIONS								
Total	55	56	57	57	56	56	1	0
White	58	59	59	59	59	58	0	-1
African American	34	37	38	40	38	40	6	2
Hispanic	44	45	45	46	45	45	1	0
Asian American[g]	65	66	65	65	64	65	0	1
American Indian[h]	32	36	37	37	37	36	4	-1
WOMEN								
Total	57	58	58	59	58	58	1	0
White	60	61	61	61	61	60	0	-1
African American	36	41	41	43	42	45	9	3
Hispanic	46	48	48	49	48	47	1	-1
Asian American[g]	67	70	67	69	66	68	1	2
American Indian[h]	32	38	40	38	37	38	6	1
MEN								
Total	54	54	55	55	54	53	-1	-1
White	56	57	57	57	57	56	0	-1
African American	30	33	34	35	33	34	4	1
Hispanic	41	42	42	43	42	43	2	1
Asian American[g]	63	63	62	62	61	62	-1	1
American Indian[h]	32	33	34	37	35	32	0	-3
PUBLIC								
Total	52	53	53	53	53	52	0	-1
White	54	55	56	56	55	55	1	0
African American	31	34	36	37	35	38	7	3
Hispanic	39	41	41	42	40	40	1	0
Asian American[g]	62	63	60	61	60	61	-1	1
American Indian[h]	30	33	34	35	33	33	3	0
INDEPENDENT								
Total	70	71	70	69	70	70	0	0
White	72	73	72	71	72	72	0	0
African American	52	56	51	49	51	52	0	1
Hispanic	64	66	66	65	64	64	0	0
Asian American[g]	77	80	78	77	77	78	1	1
American Indian[h]	45	57	58	56	54	54	9	0

[a] Graduation rates are based on full-time degree-seeking students at 298 NCAA Division I institutions. This six-year completion rate is based on the 1986–87 freshman cohort and includes all students who graduated by August 1992.

[b] Graduation rates are based on full-time degree-seeking students at 301 NCAA Division I institutions. This six-year completion rate is based on the 1987–88 freshman cohort and includes all students who graduated by August 1993.

[c] Graduation rates are based on full-time degree-seeking students at 302 NCAA Division I institutions. This six-year completion rate is based on the 1988–89 freshman cohort and includes all students who graduated by August 1994.

[d] Graduation rates are based on full-time degree-seeking students at 305 NCAA Division I institutions. This six-year completion rate is based on the 1989–90 freshman cohort and includes all students who graduated by August 1995.

[e] Graduation rates are based on full-time degree-seeking students at 306 NCAA Division I institutions. This six-year completion rate is based on the 1990–91 freshman cohort and includes all students who graduated by August 1996.

[f] Graduation rates are based on full-time degree-seeking students at 308 NCAA Division I institutions. This six-year completion rate is based on the 1991–92 freshman cohort and includes all students who graduated by August 1997.

[g] Asian American includes Pacific Islanders.

[h] American Indian includes Alaska Natives.

Source: National Collegiate Athletic Association, Division I Graduation Rates Report, 1991–92, 1992–93, and 1993 through 1997.

Table 10

Associate Degrees, by Race/Ethnicity and Gender: Selected Years, 1987 to 1997

	1987		1993		1995		1996		1997		Percent Change 1987–97	Percent Change 1993–97	Percent Change 1996–97
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent			
Total	436,304	100.0	508,154	100.0	538,545	100.0	554,625	100.0	563,620	100.0	29.2	10.9	1.6
Men[a]	190,839	43.7	209,051	41.1	217,730	40.4	219,977	39.7	220,722	39.2	15.7	5.6	0.3
Women[b]	245,465	56.3	299,103	58.9	320,815	59.6	334,648	60.3	342,898	60.8	39.7	14.6	2.5
White[c]	361,861	82.9	405,883	79.9	419,323	77.9	425,028	76.8	424,364	75.3	17.3	4.6	-0.2
Men[d]	158,132	82.9	167,312	80.0	169,475	77.8	168,858	77.1	166,732	75.5	5.4	-0.3	-1.3
Women[e]	203,729	83.0	238,571	79.8	249,848	77.9	256,170	76.5	257,632	75.1	26.5	8.0	0.6
Minority	69,755	16.0	93,342	18.4	109,364	20.3	118,482	21.4	128,661	22.8	84.4	37.8	8.6
Men	30,151	15.8	37,961	18.2	43,892	20.2	45,747	20.8	49,394	22.4	63.8	30.1	8.0
Women	39,604	16.1	55,381	18.5	65,472	20.4	72,735	21.7	79,267	23.1	100.1	43.1	9.0
African American	35,447	8.1	42,340	8.3	47,142	8.8	51,672	9.3	55,260	9.8	55.9	30.5	6.9
Men	13,959	7.3	15,497	7.4	16,786	7.7	17,854	8.2	18,994	8.6	36.1	22.6	6.4
Women	21,488	8.8	26,843	9.0	30,356	9.5	33,818	10.1	36,266	10.6	68.8	35.1	7.2
Hispanic	19,334	4.4	29,991	5.9	36,013	6.7	38,163	6.9	42,645	7.6	120.6	42.2	11.7
Men	8,760	4.6	12,924	6.2	15,717	7.2	15,700	7.2	17,583	8.0	100.7	36.0	12.0
Women	10,574	4.3	17,067	5.7	20,296	6.3	22,463	6.7	25,062	7.3	137.0	46.8	11.6
Asian American[f]	11,779	2.7	16,632	3.3	20,717	3.8	23,091	4.2	24,829	4.4	110.8	49.3	7.5
Men	6,169	3.2	7,877	3.8	9,283	4.3	10,204	4.7	10,770	4.9	74.6	36.7	5.5
Women	5,610	2.3	8,755	2.9	11,434	3.6	12,887	3.9	14,059	4.1	150.6	60.6	9.1
American Indian[g]	3,195	0.7	4,379	0.9	5,492	1.0	5,556	1.0	5,927	23.9	85.5	35.4	6.7
Men	1,263	0.7	1,663	0.8	2,106	1.0	1,989	0.9	2,047	19.0	62.1	23.1	2.9
Women	1,932	0.8	2,716	0.9	3,386	1.1	3,567	1.1	3,880	27.6	100.8	42.9	8.8
Nonresident Alien	4,688	1.1	8,929	1.8	9,858	1.8	10,115	1.9	10,595	178.8	126.0	18.7	4.7
Men	2,556	1.3	3,778	1.8	4,363	2.0	4,372	2.0	4,596	224.5	79.8	21.7	5.1
Women	2,132	0.9	5,151	1.7	5,495	1.7	5,743	1.7	5,999	154.6	181.4	16.5	4.5

[a] Degrees awarded to men as a percentage of all associate degrees awarded that year.

[b] Degrees awarded to women as a percentage of all associate degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all associate degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all associate degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all associate degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaska Natives.

Note: Data exclude persons whose racial/ethnic group and field of study were not available.

Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics*. Washington, DC: 1999.

Table 11

Bachelor's Degrees, by Race/Ethnicity and Gender: Selected Years, 1987 to 1997

	1987		1993		1995		1996		1997		Percent Change 1987–97	Percent Change 1993–97	Percent Change 1996–97
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent			
Total	991,264	100.0	1,159,931	100.0	1,158,788	100.0	1,163,036	100.0	1,168,023	100.0	17.8	0.7	0.4
Men[a]	480,762	48.5	530,541	45.7	525,174	45.3	521,439	44.8	517,901	44.3	7.7	-2.4	-0.7
Women[b]	510,482	51.5	629,390	54.3	633,614	54.7	641,597	55.2	650,122	55.7	27.4	3.3	1.3
White (non-Hispanic)[c]	841,818	84.9	947,309	81.7	913,377	78.8	904,709	77.9	898,224	76.9	6.7	-5.2	-0.7
Men[d]	406,749	84.6	435,084	82.0	417,006	79.4	408,829	78.4	401,878	77.6	-1.2	-7.6	-1.7
Women[e]	435,069	85.2	512,225	81.4	496,371	78.3	495,880	77.3	496,346	76.3	14.1	-3.1	0.1
Minority	120,138	12.1	180,382	15.6	208,488	18.0	221,783	19.1	231,372	19.8	92.6	28.3	4.8
Men	54,536	11.3	76,490	14.4	87,084	16.6	91,361	17.5	94,615	18.3	73.5	23.7	3.6
Women	65,704	12.9	103,892	16.5	121,404	19.2	129,422	20.2	136,757	21.0	108.1	31.6	5.7
African American (non-Hispanic)	56,560	5.7	77,872	6.7	87,203	7.5	91,166	7.8	94,053	8.1	66.3	20.8	3.2
Men	22,601	4.7	28,883	5.4	31,775	6.1	32,852	6.3	33,509	6.5	48.3	16.0	2.0
Women	34,059	6.7	48,989	7.8	55,428	8.7	58,314	9.1	60,544	9.3	77.8	23.6	3.8
Hispanic	26,988	2.7	45,376	3.9	54,201	4.7	58,288	5.0	61,941	5.3	129.5	36.5	6.3
Men	12,865	2.7	19,865	3.7	23,600	4.5	24,994	4.8	26,007	5.0	102.2	30.9	4.1
Women	14,123	2.8	25,511	4.1	30,601	4.8	33,294	5.2	35,934	5.5	154.4	40.9	7.9
Asian American[f]	32,624	3.3	51,463	4.4	60,478	5.2	64,359	5.5	67,969	5.8	108.3	32.1	5.6
Men	17,253	3.6	25,293	4.8	28,973	5.5	30,630	5.9	32,111	6.2	86.1	27.0	4.8
Women	15,371	3.0	26,170	4.2	31,505	5.0	33,729	5.3	35,858	5.5	133.3	37.0	6.3
American Indian[g]	3,966	0.4	5,671	0.5	6,606	0.6	6,970	0.6	7,409	0.6	86.8	30.6	6.3
Men	1,817	0.4	2,449	0.5	2,736	0.5	2,885	0.6	2,988	0.6	64.4	22.0	3.6
Women	2,151	0.4	3,222	0.5	3,870	0.6	4,085	0.6	4,421	0.7	105.5	37.2	8.2
Nonresident Alien	29,306	3.0	32,240	2.8	36,923	3.2	37,544	3.2	38,427	3.3	31.1	19.2	2.4
Men	19,597	4.1	18,967	3.6	21,084	4.0	21,249	4.1	21,408	4.1	9.2	12.9	0.7
Women	9,709	1.9	13,273	2.1	15,839	2.5	16,295	2.5	17,019	2.6	75.3	28.2	4.4

[a] Degrees awarded to men as a percentage of all bachelor's degrees awarded that year.

[b] Degrees awarded to women as a percentage of all bachelor's degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all bachelor's degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all bachelor's degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all bachelor's degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaska Natives.

Note: Data exclude persons whose racial/ethnic group and field of study were not available.

Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999.

Table 12

Master's Degrees, by Race/Ethnicity and Gender: Selected Years, 1987 to 1997

	1987		1993		1995		1996		1997		Percent Change 1987–97	Percent Change 1993–97	Percent Change 1996–97
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent			
Total	289,349	100.0	368,701	100.0	397,052	100.0	405,521	100.0	414,882	100.0	43.4	12.5	2.3
Men[a]	141,269	48.8	168,754	45.8	178,123	44.9	178,661	44.1	178,165	42.9	26.1	5.6	-0.3
Women[b]	148,080	51.2	199,947	54.2	218,929	55.1	226,860	55.2	236,717	57.1	59.9	18.4	4.3
White (non-Hispanic)[c]	228,874	79.1	278,829	75.6	292,784	73.7	297,558	73.4	302,541	72.9	32.2	8.5	1.7
Men[d]	105,572	74.7	120,225	71.2	123,809	69.5	124,514	65.7	124,060	69.6	17.5	3.2	-0.4
Women[e]	123,302	76.3	158,604	79.3	168,975	77.2	173,044	76.3	178,481	75.4	44.8	12.5	3.1
Minority	30,579	10.6	45,718	12.4	55,541	14.0	59,952	14.8	63,812	15.4	108.7	39.6	6.4
Men	14,251	10.1	19,686	11.7	23,172	13.0	24,352	13.6	24,594	13.8	72.6	24.9	1.0
Women	16,318	11.0	26,032	13.0	32,369	14.8	35,801	15.8	39,218	16.6	140.3	50.7	9.5
African American (non-Hispanic)	13,873	4.8	19,780	5.4	24,171	6.1	25,601	6.4	28,224	6.8	103.4	42.7	10.2
Men	5,153	3.6	6,821	4.0	8,103	4.5	8,442	4.7	8,871	5.0	72.2	30.1	5.1
Women	8,720	7.7	12,959	6.5	16,068	7.3	17,359	7.7	19,353	8.2	121.9	49.3	11.5
Hispanic	7,044	2.4	10,665	2.9	12,907	3.3	14,412	3.6	15,187	3.7	115.6	42.4	5.4
Men	3,331	2.4	4,735	2.8	5,490	3.1	5,833	3.3	6,115	3.4	83.6	29.1	4.8
Women	3,713	3.8	5,930	3.0	7,417	3.4	8,579	3.6	9,072	3.8	144.3	53.0	5.7
Asian American[f]	8,559	3.0	13,866	3.8	16,842	4.2	18,161	4.5	18,477	4.5	115.9	33.3	1.7
Men	5,239	3.7	7,544	4.5	8,920	5.0	9,373	5.2	8,879	5.0	69.5	17.7	-5.3
Women	3,320	3.9	6,322	3.2	7,922	3.6	8,789	3.9	9,598	4.1	189.1	51.8	9.2
American Indian[g]	1,103	0.4	1,407	0.4	1,621	0.4	1,778	0.4	1,924	0.5	74.4	36.7	8.2
Men	528	0.4	586	0.3	659	0.4	704	0.4	729	0.4	38.1	24.4	3.6
Women	565	0.5	821	0.4	962	0.4	1,074	0.5	1,195	0.5	111.5	45.6	11.3
Nonresident Alien	29,836	10.3	44,154	12.0	48,727	12.3	47,811	11.9	48,529	11.7	62.7	9.9	1.5
Men	21,456	15.2	28,843	17.1	31,142	17.5	29,796	16.7	29,511	16.6	37.5	2.3	-1.0
Women	5,440	7.9	15,311	7.7	17,585	8.0	18,016	7.9	19,018	8.0	249.6	24.2	5.6

[a] Degrees awarded to men as a percentage of all master's degrees awarded that year.

[b] Degrees awarded to women as a percentage of all master's degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all master's degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all master's degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all master's degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaska Natives.

Note: Data exclude persons whose racial/ethnic group and field of study were not available.

Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999.

Table 13

First-Professional Degrees, by Race/Ethnicity and Gender: Selected Years, 1987 to 1997

	1987		1993		1995		1996		1997		Percent Change 1987–97	Percent Change 1993–97	Percent Change 1996–97
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent			
Total	71,617	100.0	74,960	100.0	75,800	100.0	76,641	100.0	77,815	100.0	8.7	3.8	1.5
Men[a]	46,523	65.0	44,821	59.8	44,853	59.2	44,679	58.3	45,067	57.9	-3.1	0.5	0.9
Women[b]	25,094	35.0	30,139	40.2	30,947	40.8	31,962	41.7	32,748	42.1	30.5	8.7	2.5
White (non-Hispanic)[c]	62,688	87.5	60,830	81.1	59,402	78.4	59,456	77.6	59,852	76.9	-4.5	-1.6	0.7
Men[d]	41,149	86.4	37,157	82.9	36,146	80.6	35,732	80.0	35,749	79.3	-13.1	-3.8	0.0
Women[e]	21,539	85.8	23,673	78.5	23,256	75.1	23,724	74.2	24,103	73.6	11.9	1.8	1.6
Minority	8,045	11.2	12,612	16.8	14,787	19.5	15,572	20.3	16,352	21.0	103.3	29.7	5.0
Men	4,741	10.2	6,587	14.7	7,626	17.0	7,843	17.6	8,216	18.2	73.3	24.7	4.8
Women	3,285	13.1	6,025	20.0	7,161	23.1	7,729	24.2	8,136	24.8	147.7	35.0	5.3
African American (non-Hispanic)	3,420	4.8	4,100	5.5	4,747	6.3	5,016	6.5	5,251	6.7	53.5	28.1	4.7
Men	1,835	3.9	1,777	4.0	2,077	4.6	2,107	4.7	2,178	4.8	18.7	22.6	3.4
Women	1,565	6.3	2,323	7.7	2,670	8.6	2,909	9.1	3,073	9.4	96.4	32.3	5.6
Hispanic	2,051	2.5	2,984	4.0	3,231	4.3	3,476	4.5	3,553	4.6	73.2	19.1	2.2
Men	1,303	2.8	1,762	3.9	1,836	4.1	1,947	4.4	1,951	4.3	49.7	10.7	0.2
Women	749	3.0	1,222	4.1	1,395	4.5	1,529	4.8	1,602	4.9	113.9	31.1	4.8
Asian American[f]	2,270	3.2	5,160	6.9	6,397	8.4	6,617	8.6	7,037	9.0	210.0	36.4	6.3
Men	1,420	3.1	2,858	6.4	3,491	7.8	3,533	7.9	3,798	8.4	167.5	32.9	7.5
Women	850	3.4	2,302	7.6	2,906	9.4	3,084	9.6	3,239	9.9	281.1	40.7	5.0
American Indian[g]	304	0.4	368	0.5	412	0.5	463	0.6	511	0.7	68.1	38.9	10.4
Men	183	0.4	190	0.4	222	0.5	256	0.5	289	0.6	57.9	52.1	12.9
Women	121	0.5	178	0.6	190	0.6	207	0.6	222	0.7	83.5	24.7	7.2
Nonresident Alien	884	1.2	1,518	2.0	1,611	2.1	1,613	2.1	1,611	2.1	82.2	6.1	-0.1
Men	633	1.4	1,077	2.4	1,081	2.4	1,104	2.5	1,102	2.4	74.1	2.3	-0.2
Women	251	1.0	441	1.5	530	1.7	509	1.6	509	1.6	102.8	15.4	0.0

[a] Degrees awarded to men as a percentage of all first-professional degrees awarded that year.

[b] Degrees awarded to women as a percentage of all first-professional degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all first-professional degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all first-professional degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all first-professional degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaska Natives.

Note: Data exclude persons whose racial/ethnic group and field of study were not available.

Source: U.S. Department of Education, National Center for Education Statistics. *Digest of Education Statistics.* Washington, DC: 1999.

Table 14

Degrees Conferred by Historically Black Colleges and Universities, by Race/Ethnicity and Level: Selected Years, 1990–91 to 1996–97

ASSOCIATE DEGREES

	Number of Degrees Conferred							Degrees from Historically Black Colleges and Universities as a Percent of Total Associate Degrees						
Year	Total	White (non-Hispanic)	African American	Hispanic	Asian American	American Indian	Non-resident Alien	Total	White (non-Hispanic)	African American	Hispanic	Asian American	American Indian	Non-resident Alien
1990–91	2,613	847	1,498	133	23	1	111	0.6	0.2	4.0	0.5	0.2	0.0	1.7
1991–92	2,489	838	1,465	111	25	3	47	0.5	0.2	3.7	0.4	0.2	0.1	0.6
1992–93	2,771	1,083	1,456	173	21	4	34	0.5	0.3	3.4	0.6	0.1	0.1	0.4
1993–94	2,820	1,147	1,466	148	22	6	31	0.5	0.3	3.2	0.5	0.1	0.1	0.3
1994–95	2,805	1,186	1,319	202	17	10	50	0.5	0.3	2.9	0.5	0.1	0.2	0.5
1995–96	2,914	1,145	1,466	212	19	7	63	0.5	0.3	2.9	0.5	0.1	0.1	0.6
1996–97	2,843	1,098	1,461	211	37	4	32	0.5	0.3	2.6	0.5	0.1	0.1	0.3

BACHELOR'S DEGREES

	Number of Degrees Conferred							Degrees from Historically Black Colleges and Universities as a Percent of Total Bachelor's Degrees						
1990–91	21,439	2,282	17,930	130	175	37	885	2.0	0.3	27.4	0.4	0.4	0.8	3.0
1991–92	23,425	2,576	19,693	150	185	35	786	2.1	0.3	27.2	0.4	0.4	0.7	2.8
1992–93	26,003	2,880	22,020	142	219	48	724	2.2	0.3	28.3	0.3	0.4	0.8	2.2
1993–94	27,391	2,955	23,434	154	197	44	607	2.3	0.3	28.0	0.3	0.4	0.7	1.8
1994–95	28,327	3,060	23,953	231	184	51	767	2.4	0.3	28.1	0.3	0.3	0.8	2.1
1995–96	29,629	3,077	25,392	185	214	56	705	2.6	0.3	28.3	0.3	0.3	0.8	1.9
1996–97	29,283	3,001	25,168	189	190	55	680	2.5	0.3	27.3	0.3	0.3	0.8	1.7

MASTER'S DEGREES

	Number of Degrees Conferred							Degrees from Historically Black Colleges and Universities as a Percent of Total Master's Degrees						
1990–91	4,139	1,087	2,505	41	132	5	369	1.3	0.4	15.5	0.5	1.2	0.4	1.0
1991–92	4,202	1,053	2,619	43	104	8	375	1.2	0.4	14.5	0.5	0.8	0.6	1.0
1992–93	4,600	1,167	2,766	39	158	7	463	1.2	0.4	14.0	0.4	1.1	0.5	1.0
1993–94	4,950	1,140	3,187	33	186	9	395	1.3	0.4	14.5	0.3	1.2	0.5	0.9
1994–95	5,560	1,348	3,462	44	193	14	436	1.4	0.5	15.1	0.3	1.2	0.9	0.9
1995–96	5,780	1,411	3,806	61	120	21	261	1.5	0.5	15.5	0.4	0.7	1.2	0.7
1996–97	6,356	1,615	4205	66	124	12	334	1.6	0.6	15.6	0.4	0.7	0.7	0.7

DOCTORAL DEGREES

	Number of Degrees Conferred							Degrees from Historically Black Colleges and Universities as a Percent of Total Doctoral Degrees						
1990–91	200	30	131	0	3	1	35	0.5	0.1	10.8	0.0	0.2	1.0	0.4
1991–92	205	46	119	2	2	0	36	0.5	0.2	9.7	0.2	0.1	0.0	0.3
1992–93	213	31	128	1	6	0	47	0.5	0.1	9.5	0.1	0.4	0.0	0.4
1993–94	210	32	130	5	3	0	40	0.5	0.1	9.3	0.6	0.1	0.0	0.3
1994–95	230	38	142	3	3	0	44	0.5	0.1	8.8	0.3	0.1	0.0	0.4
1995–96	236	34	166	1	3	1	31	0.5	0.1	10.6	0.1	0.1	0.7	0.3
1996–97	235	33	155	3	6	1	37	0.5	0.1	8.6	0.3	0.2	0.6	0.3

FIRST-PROFESSIONAL DEGREES

	Number of Degrees Conferred							Degrees from Historically Black Colleges and Universities as a Percent of Total First-Professional Degrees						
1990–91	798	173	509	46	15	0	55	1.1	0.3	14.2	1.8	0.4	0.0	5.1
1991–92	756	172	449	43	16	1	75	1.0	0.3	12.6	1.6	0.4	0.3	6.0
1992–93	966	185	627	55	19	0	80	1.3	0.3	15.3	1.8	0.4	0.0	5.3
1993–94	1,011	169	688	48	33	1	72	1.3	0.3	15.5	1.5	0.6	0.3	5.0
1994–95	1,147	185	811	40	35	2	74	1.5	0.3	17.4	1.0	0.6	0.5	4.6
1995–96	1,176	175	841	59	42	3	56	1.5	0.3	17.0	1.4	0.6	0.7	3.4
1996–97	1,328	239	885	75	70	2	57	1.7	0.4	17.0	1.8	1.0	0.4	3.4

Note: Data in this table exclude persons whose racial/ethnic identification was not available. Because of rounding, details may not add to totals.

Source: Hoffman, Charlene, Thomas D. Snyder, and Bill Sonnenberg. *Historically Black Colleges and Universities, 1976–90.* Department of Education, National Center for Education Statistics. Washington, DC: July 1992. U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS). "Completions" surveys, 1990–91 through 1996–97.

Table 15

Degrees Conferred by Hispanic-Serving Institutions, within the 50 States and the District of Columbia, by Race/Ethnicity and Level: 1992–93 to 1996–97

ASSOCIATE DEGREES

	Number of Degrees Conferred							Degrees from Hispanic-Serving Institutions as a Percent of Total Associate Degrees						
Year	Total	White (non-Hispanic)	African American	Hispanic	Asian American	American Indian	Non-resident Alien	Total	White (non-Hispanic)	African American	Hispanic	Asian American	American Indian	Non-resident Alien
1992–93	33,459	11,535	5,214	12,678	1,947	243	1,233	6.5	2.9	12.7	43.7	12.1	5.8	13.7
1993–94	37,991	14,015	5,274	13,569	2,548	337	1,382	7.0	3.3	11.6	42.7	13.9	7.2	13.6
1994–95	37,964	13,630	4,995	14,508	2,615	329	1,292	7.0	3.4	10.9	41.4	13.0	6.1	13.1
1995–96	48,460	18,234	6,819	17,274	3,833	454	1,846	8.9	4.4	13.3	45.7	16.9	8.3	18.1
1996–97	49,126	16,635	6,972	19,553	3,596	452	1,918	8.8	3.9	12.6	45.9	14.6	7.7	17.7

BACHELOR'S DEGREES

	Number of Degrees Conferred							Degrees from Hispanic-Serving Institutions as a Percent of Total Bachelor's Degrees						
1992–93	23,886	10,076	1,211	8,853	1,520	153	869	2.0	1.1	2.8	19.9	3.0	2.7	2.7
1993–94	24,103	9,732	2,179	9,442	1,468	219	876	2.1	1.1	2.7	19.2	2.7	3.6	2.6
1994–95	28,315	11,089	2,853	10,773	1,798	266	1,114	2.4	1.2	3.4	20.4	3.0	4.1	3.0
1995–96	40,401	17,527	4,084	13,823	2,965	360	1,642	3.5	2.0	4.6	24.3	4.7	5.3	4.3
1996–97	35,436	13,426	3,871	13,961	2,500	341	1,337	3.1	1.5	4.2	22.9	3.7	4.7	3.4

MASTER'S DEGREES

	Number of Degrees Conferred							Degrees from Hispanic-Serving Institutions as a Percent of Total Master's Degrees						
1992–93	8,171	4,347	591	1,706	328	55	1,033	2.2	1.6	3.1	16.8	2.5	4.1	2.3
1993–94	8,692	4,662	610	1,851	437	90	938	2.2	1.7	2.9	16.4	3.0	5.6	2.0
1994–95	10,756	5,514	944	2,303	464	70	1,232	2.7	2.0	4.1	18.9	2.9	4.5	2.5
1995–96	14,621	8,062	1,155	2,977	686	95	1,646	3.8	2.8	4.7	21.7	4.0	5.6	3.4
1996–97	12,075	6,336	943	2,850	587	94	1,265	3.0	2.2	3.5	19.5	3.3	5.1	2.6

DOCTORAL DEGREES

	Number of Degrees Conferred							Degrees from Hispanic-Serving Institutions as a Percent of Total Doctoral Degrees						
1992–93	275	189	8	30	2	1	43	0.7	0.7	0.6	3.7	0.1	0.9	0.4
1993–94	285	195	6	38	19	1	25	0.7	0.7	0.4	4.4	1.0	0.8	0.2
1994–95	351	217	5	49	6	1	72	0.8	0.8	0.3	5.2	0.2	0.8	0.6
1995–96	598	383	21	79	13	3	99	1.4	1.5	1.3	8.3	0.5	2.0	0.9
1996–97	426	268	13	65	7	8	65	1.0	1.0	0.7	6.1	0.3	4.7	0.6

FIRST-PROFESSIONAL DEGREES

	Number of Degrees Conferred							Degrees from Hispanic-Serving Institutions as a Percent of Total First-Professional Degrees						
1992–93	665	523	11	77	22	16	0	0.9	0.9	0.3	2.6	0.4	4.4	0.0
1993–94	588	420	17	112	19	10	3	0.8	0.7	0.4	3.7	0.3	2.8	0.2
1994–95	761	517	21	129	48	6	11	1.0	0.9	0.5	4.1	0.8	1.5	0.7
1995–96	1,423	963	79	257	90	21	13	1.9	1.7	1.6	7.4	1.4	4.5	0.8
1996–97	818	553	33	158	51	19	4	1.1	0.9	0.6	4.4	0.7	3.7	0.2

Note: Hispanic-serving institutions are those two-year and four-year institutions at which Hispanics constitute a minimum of 25 percent of the undergraduate enrollment. Data exclude persons whose racial/ethnic group was not available. Therefore, the sum of the details may not equal the total.

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS). "Completions" surveys, 1990–91 through 1996–97.

Table 16

Bachelor's Degrees for Selected Fields, by Race/Ethnicity and Gender: 1987, 1996, and 1997

Field of Study	TOTAL 1987 Total	TOTAL 1996 Total	TOTAL 1997 Total	TOTAL Percent Change 1987–97	TOTAL Percent Change 1996–97	WHITE 1987 Total	WHITE 1996 Total	WHITE 1997 Total	WHITE Percent Change 1987–97	WHITE Percent Change 1996–97
EDUCATION										
Total	87,083	105,509	105,233	20.8	-0.3	78,216	91,259	90,004	15.1	-1.4
Men	20,759	26,233	26,271	26.6	0.1	18,050	22,539	22,353	23.8	-0.8
Women	66,324	79,276	78,962	19.1	-0.4	60,166	68,720	67,651	12.4	-1.6
BUSINESS										
Total	241,100	227,102	226,633	-6.0	-0.2	205,118	168,220	166,729	-18.7	-0.9
Men	128,920	116,842	116,519	-9.6	-0.3	111,091	89,656	88,722	-20.1	-1.0
Women	112,180	110,260	110,114	-1.8	-0.1	94,027	78,007	78,007	-17.0	-0.7
SOCIAL SCIENCES										
Total	125,820	126,479	124,891	-0.7	-1.3	81,659	96,637	93,662	14.7	-3.1
Men	78,070	65,872	64,115	-17.9	-2.7	46,493	51,938	49,868	7.3	-4.0
Women	47,750	60,607	60,776	27.3	0.3	35,166	44,699	43,794	24.5	-2.0
HEALTH PROFESSIONS										
Total	53,766	84,036	85,631	59.3	1.9	55,410	69,156	69,702	25.8	0.8
Men	11,396	15,432	15,877	39.3	2.9	7,790	12,515	12,678	62.7	1.3
Women	42,370	68,604	69,754	64.6	1.7	47,620	56,641	57,024	19.7	0.7
BIOLOGICAL/LIFE SCIENCES										
Total	54,100	60,994	63,975	18.3	4.9	31,279	44,676	46,398	48.3	3.9
Men	35,393	28,849	29,470	-16.7	2.2	16,393	21,586	21,913	33.7	1.5
Women	18,707	32,145	34,505	84.4	7.3	14,886	23,090	24,485	64.5	6.0
ENGINEERING[a]										
Total	45,473	77,303	75,001	64.9	-3.0	73,288	55,904	53,468	-27.0	-4.4
Men	44,015	64,832	62,510	42.0	-3.6	63,608	47,707	45,347	-28.7	-4.9
Women	1,458	12,471	12,491	756.7	0.2	9,680	8,197	8,121	-16.1	-0.9

Continued on next page

[a] Engineering includes engineering technologies.

Note: Some institutions did not report racial/ethnic data for earned degrees. Data for some of these nonreporting institutions were imputed. Data represent programs, not organizational units, within institutions. Because of rounding, details may not add to totals.

Source: U.S. Department of Education, National Center for Education Statistics. *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1984–85 through 1990–91*. Washington, DC: August 1993; and National Center for Education Statistics. *Digest of Education Statistics*. Washington, DC: 1999.

Table 16 - Continued

Bachelor's Degrees for Selected Fields, by Race/Ethnicity and Gender: 1987, 1996, and 1997

	ALL MINORITIES					AFRICAN AMERICAN				
Field of Study	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–1997
EDUCATION										
Total	8,020	13,344	14,264	77.9	6.9	4,253	7,149	7,540	77.3	5.5
Men	2,302	3,401	3,649	58.5	7.3	1,348	1,863	1,952	44.8	4.8
Women	5,718	9,943	10,615	85.6	6.8	2,905	5,286	5,588	92.4	5.7
BUSINESS										
Total	27,868	46,088	46,860	68.1	1.7	14,686	20,190	19,999	36.2	-0.9
Men	12,575	19,865	20,315	61.6	2.3	6,051	7,728	7,725	27.7	0.0
Women	15,293	26,223	26,545	73.6	1.2	8,635	12,462	12,274	42.1	-1.5
SOCIAL SCIENCES										
Total	12,231	26,046	27,390	123.9	5.2	5,942	10,977	11,298	90.1	2.9
Men	5,937	11,840	12,148	104.6	2.6	2,676	4,635	4,564	70.6	-1.5
Women	6,294	14,206	15,242	142.2	7.3	3,266	6,342	6,734	106.2	6.2
HEALTH PROFESSIONS										
Total	7,005	13,762	14,827	111.7	7.7	3,822	6,317	6,599	72.7	4.5
Men	1,119	2,665	2,909	160.0	9.2	481	938	962	100.0	2.6
Women	5,886	11,097	11,918	102.5	7.4	3,341	5,379	5,637	68.7	4.8
BIOLOGICAL/LIFE SCIENCES										
Total	5,958	14,957	16,123	170.6	7.8	1,932	3,874	4,209	117.9	8.6
Men	2,819	6,653	6,893	144.5	3.6	740	1,261	1,334	80.3	5.8
Women	3,139	8,304	9,230	194.0	11.2	1,192	2,613	2,875	141.2	10.0
ENGINEERING[a]										
Total	12,768	16,079	16,192	26.8	0.7	3,429	4,399	4,532	32.2	3.0
Men	10,280	12,469	12,540	22.0	0.6	2,508	3,049	3,171	26.4	4.0
Women	2,488	3,610	3,652	46.8	1.2	921	1,350	1,361	47.8	0.8

Continued on next page

[a] Engineering includes engineering technologies.

Table 16 - Continued

Bachelor's Degrees for Selected Fields, by Race/Ethnicity and Gender: 1987, 1996, and 1997

	HISPANIC					ASIAN AMERICAN[a]				
Field of Study	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97
EDUCATION										
Total	2,223	3,792	4,155	86.9	9.6	1,092	1,517	1,637	49.9	7.9
Men	518	889	995	92.1	11.9	312	415	476	52.6	14.7
Women	1,705	2,903	3,160	85.3	8.9	780	1,102	1,161	48.8	5.4
BUSINESS										
Total	6,397	11,286	11,787	84.3	4.4	6,002	13,523	13,952	132.5	3.2
Men	3,251	5,488	5,621	72.9	2.4	2,873	6,131	6,442	124.2	5.1
Women	3,146	5,798	6,166	96.0	6.3	3,129	7,392	7,510	140.0	1.6
SOCIAL SCIENCES										
Total	2,883	7,366	7,836	171.8	6.4	2,942	6,892	7,379	150.8	7.1
Men	1,564	3,568	3,665	134.3	2.7	1,448	3,242	3,519	143.0	8.5
Women	1,319	3,798	4,171	216.2	9.8	1,494	3,650	3,860	158.4	5.8
HEALTH PROFESSIONS										
Total	1,332	2,912	3,152	136.6	8.2	1,577	4,013	4,523	186.8	12.7
Men	255	650	692	171.4	6.5	337	982	1,139	238.0	16.0
Women	1,077	2,262	2,460	128.4	8.8	1,240	3,031	3,384	172.9	11.6
BIOLOGICAL/LIFE SCIENCES										
Total	1,259	2,616	2,839	125.5	8.5	2,620	8,143	8,729	233.2	7.2
Men	657	1,269	1,299	97.7	2.4	1,343	3,976	4,101	205.4	3.1
Women	602	1,347	1,540	155.8	14.3	1,277	4,167	4,628	262.4	11.1
ENGINEERING[b]										
Total	2,553	3,631	3,560	39.4	-2.0	6,497	7,695	7,735	19.1	0.5
Men	2,178	2,970	2,906	33.4	-2.2	5,347	6,164	6,180	15.6	0.3
Women	375	661	654	74.4	-1.1	1,150	1,531	1,555	35.2	1.6

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[a] Asian American includes Pacific Islanders.

[b] Engineering includes engineering technologies.

Bachelor's Degrees for Selected Fields, by Race/Ethnicity and Gender: 1987, 1996, and 1997

Field of Study	AMERICAN INDIAN [a] 1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97	NONRESIDENT ALIEN 1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97
EDUCATION										
Total	452	886	932	106.2	5.2	847	906	965	13.9	6.5
Men	124	234	226	82.3	-3.4	407	293	269	-33.9	-8.2
Women	328	652	706	115.2	8.3	440	613	696	58.2	13.5
BUSINESS										
Total	783	1,089	1,122	43.3	3.0	8,114	12,794	13,044	60.8	2.0
Men	400	518	527	31.8	1.7	5,254	7,321	7,482	42.4	2.2
Women	383	571	595	55.4	4.2	2,860	5,473	5,562	94.5	1.6
SOCIAL SCIENCES										
Total	464	811	877	89.0	8.1	2,282	3,796	3,839	68.2	1.1
Men	249	395	400	60.6	1.3	1,440	2,094	2,099	45.8	0.2
Women	215	416	477	121.9	14.7	842	1,702	1,740	106.7	2.2
HEALTH PROFESSIONS										
Total	274	520	553	101.8	6.3	798	1,118	1,102	38.1	-1.4
Men	46	95	116	152.2	22.1	268	252	290	8.2	15.1
Women	228	425	437	91.7	2.8	530	866	812	53.2	-6.2
BIOLOGICAL/LIFE SCIENCES										
Total	147	324	346	135.4	6.8	883	1,361	1,454	64.7	6.8
Men	79	147	159	101.3	8.2	444	610	664	49.5	8.9
Women	68	177	187	175.0	5.6	439	751	790	80.0	5.2
ENGINEERING[b]										
Total	289	354	365	26.3	3.1	6,969	5,320	5,341	-23.4	0.4
Men	247	286	283	14.6	-1.0	6,389	4,656	4,623	-27.6	-0.7
Women	42	68	82	95.2	20.6	580	664	718	23.8	8.1

[a] American Indian includes Alaska Natives.

[b] Engineering includes engineering technologies.

Table 17

Master's Degrees for Selected Fields, by Race/Ethnicity and Gender: 1987, 1996, and 1997

Field of Study	TOTAL 1987 Total	TOTAL 1996 Total	TOTAL 1997 Total	TOTAL Percent Change 1987–96	TOTAL Percent Change 1995–96	WHITE 1987 Total	WHITE 1996 Total	WHITE 1997 Total	WHITE Percent Change 1987–97	WHITE Percent Change 1996–97
EDUCATION										
Total	75,473	106,253	110,087	45.9	3.6	64,492	87,310	89,783	39.2	2.8
Men	19,635	25,214	25,806	31.4	2.3	16,431	20,376	20,886	27.1	2.5
Women	55,838	81,039	84,281	50.9	4.0	48,061	66,934	68,897	43.4	2.9
BUSINESS										
Total	67,504	93,982	97,619	44.6	3.9	53,582	65,685	67,531	26.0	2.8
Men	45,219	58,685	59,611	31.8	1.6	35,505	41,964	42,399	19.4	1.0
Women	22,285	35,297	38,008	70.6	7.7	18,077	23,721	25,132	39.0	5.9
SOCIAL SCIENCES										
Total	10,395	15,012	14,787	42.3	-1.5	7,441	10,339	9,928	33.4	-4.0
Men	6,293	8,093	7,830	24.4	-3.2	4,316	5,637	5,283	22.4	-6.3
Women	4,102	6,919	6,957	69.6	0.5	3,125	4,702	4,645	48.6	-1.2
HEALTH PROFESSIONS										
Total	18,421	33,398	35,958	95.2	7.7	15,724	27,008	29,414	87.1	8.9
Men	3,885	7,021	7,702	98.2	9.7	3,048	5,122	5,871	92.6	14.6
Women	14,536	26,377	28,256	94.4	7.1	12,676	21,886	23,543	85.7	7.6
PUBLIC AFFAIRS										
Total	18,523	24,229	24,781	33.8	2.3	14,867	17,968	18,092	21.7	0.7
Men	7,120	6,927	6,957	-2.3	0.4	5,465	4,989	4,950	-9.4	-0.8
Women	11,403	17,302	17,824	56.3	3.0	9,402	12,979	13,142	39.8	1.3
ENGINEERING [a]										
Total	22,662	28,566	26,827	18.4	-6.1	13,748	15,093	13,996	1.8	-7.3
Men	19,812	23,641	21,928	10.7	-7.2	11,742	12,654	11,598	-1.2	-8.3
Women	2,850	4,925	4,899	71.9	-0.5	2,006	2,439	2,398	19.5	-1.7

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[a] Engineering includes engineering technologies.

Note: Some institutions did not report racial/ethnic data for earned degrees. Data for some of these nonreporting institutions were imputed. Data represent programs, not organizational units, within institutions. Because of rounding, details may not add to totals.

Source: U.S. Department of Education, National Center for Education Statistics. *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1984–85 through 1990–91*. Washington, DC: August 1993; and National Center for Education Statistics. *Digest of Education Statistics*. Washington, DC: 1997.

Master's Degrees for Selected Fields, by Race/Ethnicity and Gender: 1987, 1996, and 1997

	ALL MINORITIES					AFRICAN AMERICAN				
	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97
EDUCATION										
Total	8,582	15,616	17,143	99.8	9.8	5,250	8,557	9,630	83.4	12.5
Men	2,080	3,724	3,950	89.9	6.1	1,127	1,991	2,146	90.4	7.8
Women	6,502	11,892	13,193	102.9	10.9	4,123	6,566	7,484	81.5	14.0
BUSINESS										
Total	6,721	14,410	15,523	131.0	7.7	2,810	5,753	6,359	126.3	10.5
Men	4,234	7,789	8,042	89.9	3.2	1,637	2,611	2,810	71.7	7.6
Women	2,487	6,621	7,481	200.8	13.0	1,173	3,142	3,549	202.6	13.0
SOCIAL SCIENCES										
Total	934	2,032	2,177	133.1	7.1	416	911	954	129.3	4.7
Men	549	954	1,017	85.2	6.6	226	380	411	81.9	8.2
Women	385	1,078	1,160	201.3	7.6	190	531	543	185.8	2.3
HEALTH PROFESSIONS										
Total	1,785	4,859	4,865	172.5	0.1	856	1,875	2,003	134.0	6.8
Men	375	1,257	1,145	205.3	-8.9	139	311	341	145.3	9.6
Women	1,410	3,602	3,720	163.8	3.3	717	1,564	1,662	131.8	6.3
PUBLIC AFFAIRS										
Total	2,827	5,149	5,502	94.6	6.9	1,718	3,004	3,234	88.2	7.7
Men	1,097	1,407	1,438	31.1	2.2	604	753	803	32.9	6.6
Women	1,730	3,742	4,064	134.9	8.6	1,114	2,251	2,431	118.2	8.0
ENGINEERING [a]										
Total	2,803	4,371	4,005	42.9	-8.4	449	766	780	73.7	1.8
Men	2,421	3,297	2,990	23.5	-9.3	351	528	525	49.6	-0.6
Women	382	1,074	1,015	165.7	-5.5	98	238	255	160.2	7.1

Continued on next page

[a] Engineering includes engineering technologies.

Table 17 - Continued

Master's Degrees for Selected Fields, by Race/Ethnicity and Gender: 1987, 1996, and 1997

	HISPANIC					ASIAN AMERICAN[a]				
	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97
EDUCATION										
Total	2,232	4,628	4,904	119.7	6.0	724	1,833	1,990	174.9	8.6
Men	601	1,110	1,201	99.8	8.2	232	464	444	91.4	-4.3
Women	1,631	3,518	3,703	127.0	5.3	492	1,369	1,546	214.2	12.9
BUSINESS										
Total	1,437	2,938	3,163	120.1	7.7	2,304	5,417	5,681	146.6	4.9
Men	954	11,800	1,873	96.3	4.1	1,531	3,194	3,179	107.6	-0.5
Women	483	1,138	1,290	167.1	13.4	2,022	187.6	2,502	223.7	12.6
SOCIAL SCIENCES										
Total	245	511	549	124.1	7.4	250	530	609	143.6	14.9
Men	154	273	304	97.4	11.4	152	269	267	75.7	-0.7
Women	91	238	245	169.2	2.9	98	261	342	249.0	31.0
HEALTH PROFESSIONS										
Total	378	996	1,013	168.0	1.7	489	1,832	1,675	242.5	-8.6
Men	72	235	241	234.7	2.6	152	670	529	248.0	-21.0
Women	306	761	772	152.3	1.4	337	1,162	1,146	240.1	-1.4
PUBLIC AFFAIRS										
Total	628	1,267	1,300	107.0	2.6	337	713	773	129.4	8.4
Men	275	378	361	31.3	-4.5	158	227	212	34.2	-6.6
Women	353	889	939	166.0	5.6	179	486	561	213.4	15.4
ENGINEERING[b]										
Total	533	743	736	38.1	-0.9	1,757	2,800	2,488	41.6	-11.1
Men	460	573	575	25.0	0.3	1,552	2,140	1,889	21.7	-11.7
Women	73	170	161	120.5	-5.3	205	660	599	192.2	-9.2

Continued on next page

[a] Asian American includes Pacific Islanders.

[b] Engineering includes engineering technologies.

Master's Degrees for Selected Fields, by Race/Ethnicity and Gender: 1987, 1996, and 1997

	AMERICAN INDIAN [a]					NONRESIDENT ALIEN				
	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97	1987 Total	1996 Total	1997 Total	Percent Change 1987–97	Percent Change 1996–97
EDUCATION										
Total	376	598	619	64.6	3.5	2,399	3,327	3,161	31.8	-5.0
Men	120	159	159	32.5	0.0	1,124	1,114	970	-13.7	-12.9
Women	256	439	460	79.7	4.8	1,275	2,213	2,191	71.8	-1.0
BUSINESS										
Total	170	302	320	88.2	6.0	7,201	13,887	14,565	102.3	4.9
Men	112	184	180	60.7	-2.2	5,480	8,932	9,170	67.3	2.7
Women	58	118	140	141.4	18.6	1,721	4,955	5,395	213.5	8.9
SOCIAL SCIENCES										
Total	23	80	65	182.6	-18.8	2,020	2,641	2,682	32.8	1.6
Men	17	32	35	105.9	9.4	1,428	1,502	1,530	7.1	1.9
Women	6	48	30	400.0	-37.5	592	1,139	1,152	94.6	1.1
HEALTH PROFESSIONS										
Total	62	156	174	180.6	11.5	912	1,531	1,679	84.1	9.7
Men	12	41	34	183.3	-17.1	462	642	686	48.5	6.9
Women	50	115	140	180.0	21.7	450	889	993	120.7	11.7
PUBLIC AFFAIRS										
Total	144	165	195	35.4	18.2	829	1,112	1,187	43.2	6.7
Men	60	49	62	3.3	26.5	558	531	569	2.0	7.2
Women	84	116	133	58.3	14.7	271	581	618	128.0	6.4
ENGINEERING[b]										
Total	64	62	57	-10.9	-8.1	6,111	9,102	8,770	43.5	-3.6
Men	58	56	50	-13.8	-10.7	5,649	7,690	7,291	29.1	-5.2
Women	6	6	7	-16.7	-16.7	462	1,412	1,479	220.1	4.7

[a] American Indian includes Alaska Natives.

[b] Engineering includes engineering technologies.

Table 18

Doctoral Degrees, by U.S. Citizenship, Race/Ethnicity, and Gender: 1987 to 1997

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Percent Change 1987–97	Percent Change 1996–97
Total Doctorates[a]	32,370	33,501	34,326	36,067	37,522	38,856	39,771	41,017	41,610	42,415	42,705	31.9	0.7
Men	20,938	21,682	21,813	22,962	23,652	24,436	24,658	25,211	25,277	25,267	24,999	19.4	-1.1
Women	11,432	11,819	12,513	13,105	13,870	14,420	15,113	15,806	16,333	16,945	17,322	51.5	2.2
U.S. CITIZENS[b]													
All U.S. Citizens	22,984	23,291	23,400	24,905	25,561	25,977	26,420	27,129	27,603	27,741	27,669	20.4	-0.3
Men	13,574	13,725	13,395	14,166	14,379	14,501	14,497	14,730	14,909	14,700	14,805	9.1	0.7
Women	9,410	9,566	10,005	10,739	11,182	11,476	11,923	12,399	12,694	13,041	12,852	36.6	-1.4
White	20,468	20,787	20,894	22,172	22,419	22,875	23,237	23,805	23,811	23,856	23,021	12.5	-3.5
Men	12,169	12,345	11,987	12,690	12,679	12,828	12,852	13,052	13,003	12,744	12,427	2.1	-2.5
Women	8,299	8,442	8,907	9,482	9,740	10,057	10,385	10,753	10,808	11,112	10,591	27.6	-4.7
Minority	2,046	2,121	2,130	2,359	2,654	2,741	2,951	3,070	3,517	3,542	3,840	87.7	8.4
Men	1,081	1,104	1,129	1,210	1,344	1,416	1,473	1,509	1,702	1,729	1,874	73.4	8.4
Women	965	1,017	1,001	1,149	1,310	1,325	1,478	1,561	1,815	1,813	1,966	103.7	8.4
African American	771	818	821	900	1,004	968	1,108	1,095	1,287	1,315	1,335	73.2	1.5
Men	318	317	327	351	417	394	439	409	482	535	527	65.7	-1.5
Women	453	501	494	549	587	574	669	686	805	780	808	78.4	3.6
Hispanic	617	595	582	721	731	778	834	884	916	950	1,028	66.6	8.2
Men	332	321	307	380	370	410	423	438	460	478	520	56.6	8.8
Women	285	274	275	341	361	368	411	446	456	472	508	78.2	7.6
Asian American[c]	543	614	633	641	789	846	889	949	1,138	1,091	1,329	144.8	21.8
Men	369	414	446	427	483	530	551	591	670	614	759	105.7	23.6
Women	174	200	187	214	306	316	338	358	468	477	569	227.0	19.3
American Indian[d]	115	94	94	97	130	149	120	142	148	186	149	29.6	-19.9
Men	62	52	49	52	74	82	60	71	81	102	68	9.7	-33.3
Women	53	42	45	45	56	67	60	71	67	84	81	52.8	-3.6
NON-U.S. CITIZENS													
Total	7,190	7,817	8,274	9,791	11,169	11,932	12,189	13,154	13,113	13,375	11,389	58.4	-14.8
Men	5,839	6,298	6,583	7,822	8,742	9,255	9,332	9,968	9,759	9,867	8,278	41.8	-16.1
Women	1,351	1,519	1,691	1,969	2,427	2,677	2,857	3,186	3,354	3,497	3,101	129.5	-11.3

[a] Includes doctorates earned by persons with unknown citizenship status and unknown race/ethnicity.

[b] Includes doctorates earned by persons with unknown race/ethnicity.

[c] Asian American includes Pacific Islanders.

[d] American Indian includes Alaska Natives.

Source: National Research Council, Doctorate Records File, 1987 through 1997.

Table 19

Doctoral Degrees, by Field, U.S. Citizenship, and Race/Ethnicity: 1987, 1995, 1996, and 1997

TOTAL

	1987	1995	1996	1997	Percent Change 1996–97
Total Doctorates[a]	32,370	41,743	42,415	42,705	0.7
American Indian	116	149	189	166	-12.2
Asian	4,129	9,708	9,821	9,017	-8.2
Black	1,221	1,825	1,837	1,774	-3.4
Hispanic	1,054	1,541	1,623	1,676	3.3
White	22,709	27,107	27,166	26,176	-3.6
U.S. Citizens[b]	22,984	27,740	27,741	27,669	-0.3
American Indian[c]	115	149	186	149	-19.9
Asian American[d]	543	1,140	1,091	1,329	21.8
African American	771	1,309	1,315	1,335	1.5
Hispanic	617	919	950	1,028	8.2
White	20,468	23,920	23,856	23,021	-3.5

PHYSICAL SCIENCES

	1987	1995	1996	1997	Percent Change 1996–97
Total Doctorates[a]	5,030	6,808	6,675	6,574	-1.5
American Indian	10	11	12	13	-7.1
Asian	1,014	2,293	2,212	1,942	-12.2
Black	61	102	126	105	-16.7
Hispanic	162	178	203	203	0.0
White	3,270	3,969	3,796	3,796	0.0
U.S. Citizens[b]	3,093	3,653	3,446	3,559	3.3
American Indian[c]	10	11	13	13	0.0
Asian American[d]	104	223	176	249	41.5
African American	29	52	69	59	-14.5
Hispanic	64	86	83	95	14.5
White	2,793	3,223	3,037	3,014	-0.8

ENGINEERING

	1987	1995	1996	1997	Percent Change 1996–97
Total Doctorates[a]	3,712	6,008	6,305	6,052	-4.0
American Indian	8	10	15	16	6.7
Asian	1,289	2,836	2,910	2,597	-10.8
Black	56	102	115	131	13.9
Hispanic	98	149	199	168	-15.6
White	1,835	2,640	2,764	2,747	-0.6
U.S. Citizens[b]	1,558	2,386	2,591	2,682	3.5
American Indian[c]	7	10	14	12	-14.3
Asian American[d]	135	255	271	285	5.2
African American	12	54	59	82	39.0
Hispanic	24	61	86	75	-12.8
White	1,331	1,956	2,123	2,126	0.1

LIFE SCIENCES

	1987	1995	1996	1997	Percent Change 1996–97
Total Doctorates[a]	5,754	7,918	8,255	8,213	-0.5
American Indian	16	27	31	20	-35.5
Asian	688	2,142	2,347	2,190	-6.7
Black	172	293	288	280	-2.8
Hispanic	199	333	326	329	0.9
White	4,173	4,885	4,967	4,864	-2.1
U.S. Citizens[b]	4,242	5,001	5,014	5,092	1.6
American Indian[c]	16	27	31	17	-45.2
Asian American[d]	145	266	289	314	8.7
African American	78	158	141	164	16.3
Hispanic	77	145	150	167	11.3
White	3,838	4,353	4,335	4,295	-0.9

SOCIAL SCIENCES

	1987	1995	1996	1997	Percent Change 1996–97
Total Doctorates[a]	5,790	6,635	6,814	6,917	1.5
American Indian	22	29	38	29	-23.7
Asian	427	985	908	900	-0.9
Black	230	329	327	330	0.9
Hispanic	201	291	335	327	-2.4
White	4,279	4,788	4,919	4,624	-6.0
U.S. Citizens[b]	4,402	5,052	5,195	5,016	-3.4
American Indian[c]	22	29	38	28	-26.3
Asian American[d]	76	168	127	182	43.3
African American	136	242	247	252	2.0
Hispanic	146	214	235	229	-2.6
White	3,942	4,356	4,495	4,197	-6.6

HUMANITIES

	1987	1995	1996	1997	Percent Change 1996–97
Total Doctorates[a]	3,500	5,061	5,116	5,387	5.3
American Indian	11	19	21	23	9.5
Asian	164	453	458	444	-3.1
Black	119	159	171	175	2.3
Hispanic	144	240	251	290	15.5
White	2,714	4,020	4,008	3,988	-0.5
U.S. Citizens[b]	2,733	3,981	3,959	4,120	4.1
American Indian[c]	11	19	20	20	0.0
Asian American[d]	26	91	91	110	20.9
African American	73	106	119	135	13.4
Hispanic	96	130	140	169	20.7
White	2,470	3,581	3,540	3,551	0.3

EDUCATION

	1987	1995	1996	1997	Percent Change 1996–97
Total Doctorates[a]	6,454	6,649	6,772	6,497	-4.1
American Indian	41	41	60	50	-16.7
Asian	275	459	467	418	-10.5
Black	476	689	679	604	-11.0
Hispanic	211	284	237	285	20.3
White	4,954	4,994	5,068	4,522	-10.8
U.S. Citizens[b]	5,493	5,777	5,866	5,366	-8.5
American Indian[c]	41	41	60	48	-20.0
Asian American[d]	41	82	92	98	6.5
African American	383	585	582	525	-9.8
Hispanic	185	235	204	242	18.6
White	4,758	4,801	4,879	4,373	-10.4

PROFESSIONAL-OTHER

	1987	1995	1996	1997	Percent Change 1996–97
Total Doctorates[a]	2,130	2,664	2,478	2,414	-2.6
American Indian	8	12	10	11	10.0
Asian	272	540	519	468	-9.8
Black	107	151	131	134	2.3
Hispanic	39	66	72	62	-13.9
White	1,484	1,811	1,644	1,490	-9.4
U.S. Citizens[b]	1,463	1,890	1,670	1,581	-5.3
American Indian[c]	8	12	10	9	-10.0
Asian American[d]	16	55	45	49	8.9
African American	60	112	98	107	9.2
Hispanic	25	48	52	41	-21.2
White	1,336	1,650	1,447	1,339	-7.5

[a] Total doctorates figure includes persons who did not report their citizenship at time of doctorate and those who did not report their racial/ethnic background.

[b] Includes persons who did not report their racial/ethnic background.

[c] American Indian includes Alaska Natives.

[d] Asian American includes Pacific Islanders.

Source: National Research Council, Doctorate Records File, various years.

Table 20

Full-Time Faculty in Higher Education, by Race/Ethnicity and Gender: 1985, 1993, and 1995

	1985 Total	Percent	1993 Total	Percent	1995 Total	Percent	Percent Change 1985–95	Percent Change 1993–95
TOTAL	473,537	100.0	533,770	100.0	538,023	100.0	13.6	0.8
Men	342,916	72.4	354,302	66.4	350,756	65.2	2.3	-1.0
Women	130,621	27.6	179,468	33.6	187,267	34.8	43.4	4.3
White (non-Hispanic)	426,468	90.1	468,770	87.8	468,518	87.1	9.9	-0.1
Men	311,018	90.7	313,278	88.4	307,498	87.7	-1.1	-1.8
Women	115,450	88.4	155,492	86.6	161,020	86.0	39.5	3.6
TOTAL MINORITY	47,069	9.9	65,000	12.2	69,505	12.9	47.7	6.9
Men	31,898	9.3	41,024	11.6	43,258	12.3	35.6	5.4
Women	15,171	11.6	23,976	13.4	26,247	14.0	73.0	9.5
African American (non-Hispanic)	19,559	4.1	25,658	4.8	26,835	5.0	37.2	4.6
Men	10,631	3.1	13,385	3.8	13,847	3.9	30.3	3.5
Women	8,928	6.8	12,273	6.8	12,988	6.9	45.5	5.8
Hispanic	7,788	1.6	12,076	2.3	12,942	2.4	66.2	7.2
Men	5,458	1.6	7,459	2.1	7,864	2.2	44.1	5.4
Women	2,330	1.8	4,617	2.6	5,078	2.7	117.9	10.0
Asian American[a]	18,245	3.9	25,269	4.7	27,572	5.1	51.1	9.1
Men	14,682	4.3	18,943	5.3	20,285	5.8	38.2	7.1
Women	3,563	2.7	6,326	3.5	7,287	3.9	104.5	15.2
American Indian[b]	1,477	0.3	1,997	0.4	2,156	0.4	46.0	8.0
Men	1,127	0.3	1,237	0.3	1,262	0.4	12.0	2.0
Women	350	0.3	760	0.4	894	0.5	155.4	17.6

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaska Natives.

Note: Details may not add to totals because of rounding. Includes full-time faculty who are in nontenured-earning positions, tenured faculty, and faculty who are nontenured but in positions that lead to consideration for tenure. Employment counts are based on the following number of higher education institutions each year: 2,868 in 1985; 3,385 in 1993; and 3,480 in 1995. Data were imputed for nonreporting institutions for 1993 and 1995. Figures shown here may not agree with tables showing tenure data because some respondents provided total faculty counts by race but did not further categorize by tenure status.

Source: U.S. Equal Employment Opportunity Commission. "EEO–6 Higher Education Staff Information" Surveys, 1985 and 1993. U.S. Department of Education, National Center for Education Statistics. *Fall Staff Survey*, 1995.

Table 21

Full-Time Faculty by Academic Rank, by Race/Ethnicity and Gender: 1985, 1993, and 1995

FULL PROFESSOR

	TOTAL					MEN					WOMEN				
	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95
Total	129,269	156,146	158,073	22.3	1.2	114,258	129,594	129,831	13.6	0.2	15,011	26,552	28,242	88.1	6.4
Participation Rate (%)	100.0	100.0	100.0			88.4	83.0	82.1			11.6	17.0	17.9		
White (non-Hispanic)	119,868	141,848	142,819	19.1	0.7	106,335	118,308	117,844	10.8	-0.4	13,533	23,540	24,975	84.5	6.1
Participation Rate (%)	92.7	90.8	90.4			82.3	75.8	74.6			10.5	15.1	15.8		
Total Minority	9,401	14,298	15,254	62.3	6.7	7,923	11,286	11,987	51.3	6.2	1,478	3,012	3,267	121.0	8.5
Participation Rate (%)	7.3	9.2	9.6			6.1	7.2	7.6			1.1	1.9	2.1		
African American	2,859	4,526	4,768	66.8	5.3	2,058	2,982	3,085	49.9	3.5	801	1,544	1,683	110.1	9.0
Participation Rate (%)	2.2	2.9	3.0			1.6	1.9	2.0			0.6	1.0	1.1		
Hispanic	1,455	2,387	2,470	69.8	3.5	1,206	1,776	1,912	58.5	7.7	249	611	558	124.1	-8.7
Participation Rate (%)	1.1	1.5	1.6			0.9	1.1	1.2			0.2	0.4	0.4		
Asian American[a]	4,788	7,033	7,643	59.6	8.7	4,395	6,245	6,691	52.2	7.1	393	788	952	142.2	20.8
Participation Rate (%)	3.7	4.5	4.8			3.4	4.0	4.2			0.3	0.5	0.6		
American Indian[b]	299	352	373	24.7	6.0	264	283	299	13.3	5.7	35	69	74	111.4	7.2
Participation Rate (%)	0.2	0.2	0.2			0.2	0.2	0.2			0.03	0.04	0.05		

ASSOCIATE PROFESSOR

	TOTAL					MEN					WOMEN				
	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95
Total	111,092	119,388	123,663	11.3	3.6	85,156	83,430	84,145	-1.2	0.9	25,936	35,958	39,518	52.4	9.9
Participation Rate (%)	100.0	100.0	100.0			76.7	69.9	68.0			23.3	30.1	32.0		
White (non-Hispanic)	100,630	106,017	108,953	8.3	2.8	77,483	74,191	74,160	-4.3	0.0	23,147	31,826	34,793	50.3	9.3
Participation Rate (%)	90.6	88.8	88.1			69.7	62.1	60.0			20.8	26.7	28.1		
Total Minority	10,462	13,371	14,710	40.6	10.0	7,673	9,239	9,985	30.1	8.1	2,789	4,132	4,725	69.4	14.4
Participation Rate (%)	9.4	11.2	11.9			6.9	7.7	8.1			2.5	3.5	3.8		
African American	4,201	5,326	5,634	34.1	5.8	2,595	3,089	3,214	23.9	4.0	1,606	2,237	2,420	50.7	8.2
Participation Rate (%)	3.8	4.5	4.6			2.3	2.6	2.6			1.4	1.9	2.0		
Hispanic	1,727	2,291	2,607	51.0	13.8	1,280	1,590	1,723	34.6	8.4	447	701	884	97.8	26.1
Participation Rate (%)	1.6	1.9	2.1			1.2	1.3	1.4			0.4	0.6	0.7		
Asian American[a]	4,130	5,471	6,119	48.2	11.8	3,451	4,367	4,826	39.8	10.5	679	1,104	1,293	90.4	17.1
Participation Rate (%)	3.7	4.6	4.9			3.1	3.7	3.9			0.6	0.9	1.0		
American Indian[b]	404	283	350	-13.4	23.7	347	193	222	-36.0	15.0	57	90	128	124.6	42.2
Participation Rate (%)	0.4	0.2	0.3			0.3	0.2	0.2			0.05	0.1	0.1		

ASSISTANT PROFESSOR

	TOTAL					MEN					WOMEN				
	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95
Total	111,308	124,181	124,762	12.1	0.5	71,463	70,946	69,532	-2.7	-2.0	39,845	53,235	55,230	38.6	3.7
Participation Rate (%)	100.0	100.0	100.0			64.2	57.1	55.7			35.8	42.9	44.3		
White (non-Hispanic)	97,496	105,091	104,037	6.7	-1.0	62,582	59,709	57,580	-8.0	-3.6	34,914	45,382	46,457	33.1	2.4
Participation Rate (%)	87.6	84.6	83.4			56.2	48.1	46.2			31.4	36.5	37.2		
Total Minority	13,812	19,090	20,725	50.1	8.6	8,881	11,237	11,952	34.6	6.4	4,931	7,853	8,773	77.9	11.7
Participation Rate (%)	12.4	15.4	16.6			8.0	9.0	9.6			4.4	6.3	7.0		
African American	5,895	7,686	8,011	35.9	4.2	2,923	3,801	3,897	33.3	2.5	2,972	3,885	4,114	38.4	5.9
Participation Rate (%)	5.3	6.2	6.4			2.6	3.1	3.1			2.7	3.1	3.3		
Hispanic	1,968	3,387	3,736	89.8	10.3	1,316	1,951	2,068	57.1	6.0	652	1,436	1,668	155.8	16.2
Participation Rate (%)	1.8	2.7	3.0			1.2	1.6	1.7			0.6	1.2	1.3		
Asian American[a]	5,469	7,586	8,459	54.7	11.5	4,240	5,277	5,734	35.2	8.7	1,229	2,309	2,725	121.7	18.0
Participation Rate (%)	4.9	6.1	6.8			3.8	4.2	4.6			1.1	1.9	2.2		
American Indian[b]	480	431	519	8.1	20.4	402	208	253	-37.1	21.6	78	223	266	241.0	19.3
Participation Rate (%)	0.4	0.3	0.4			0.4	0.2	0.2			0.1	0.2	0.2		

Continued on next page

Full-Time Faculty by Academic Rank, by Race/Ethnicity and Gender: 1985, 1993, and 1995

INSTRUCTOR AND LECTURER

	TOTAL					MEN					WOMEN				
	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95
Total	86,953	79,787	77,805	-10.5	-2.5	49,313	39,959	37,897	-23.2	-5.2	37,640	39,828	39,908	6.0	0.2
Participation Rate (%)	100.0	100.0	100.0			56.7	50.1	48.7			43.3	49.9	51.3		
White (non-Hispanic)	76,749	68,192	65,744	-14.3	-3.6	43,866	34,271	32,048	-26.9	-6.5	32,883	33,921	33,696	2.5	-0.7
Participation Rate (%)	88.3	85.5	84.5			50.4	43.0	41.2			37.8	42.5	43.3		
Total Minority	10,204	11,595	12,061	18.2	4.0	5,447	5,688	5,849	7.4	2.8	4,757	5,907	6,212	30.6	5.2
Participation Rate (%)	11.7	14.5	15.5			6.3	7.1	7.5			5.5	7.4	8.0		
African American	5,290	5,551	5,655	6.9	1.9	2,450	2,471	2,505	2.2	1.4	2,840	3,080	3,150	10.9	2.3
Participation Rate (%)	6.1	7.0	7.3			2.8	3.1	3.2			3.3	3.9	4.0		
Hispanic	2,084	2,678	2,959	42.0	10.5	1,280	1,404	1,538	20.2	9.5	804	1,274	1,421	76.7	11.5
Participation Rate (%)	2.4	3.4	3.8			1.5	1.8	2.0			0.9	1.6	1.8		
Asian American[a]	2,278	2,700	2,880	26.4	6.7	1,372	1,390	1,485	8.2	6.8	906	1,310	1,395	54.0	6.5
Participation Rate (%)	2.6	3.4	3.7			1.6	1.7	1.9			1.0	1.6	1.8		
American Indian[b]	552	666	567	2.7	-14.9	345	423	321	-7.0	-24.1	207	243	246	18.8	1.2
Participation Rate (%)	0.6	0.8	0.7			0.4	0.5	0.4			0.2	0.3	0.3		

OTHER FACULTY

	TOTAL					MEN					WOMEN				
	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95	1985	1993	1995	Percent Change 1985–95	Percent Change 1993–95
Total	28,566	54,268	5,3720	88.1	-1.0	17,416	30,373	29,351	68.5	-3.4	11,150	23,895	24,369	118.6	2.0
Participation Rate (%)	100.0	100.0	100.0			61.0	56.0	54.6			39.0	44.0	45.4		
White (non-Hispanic)	24,550	47,622	4,6965	91.3	-1.4	14,863	26,799	25,866	74.0	-3.5	9,687	20,823	21,099	117.8	1.3
Participation Rate (%)	85.9	87.8	87.4			52.0	49.4	48.1			33.9	38.4	39.3		
Total Minority	4,016	6,646	6,755	68.2	1.6	2,553	3,574	3,485	36.5	-2.5	1,463	3,072	3,270	123.5	6.4
Participation Rate (%)	14.1	12.2	12.6			8.9	6.6	6.5			5.1	5.7	6.1		
African American	1,203	2,569	2,767	130.0	7.7	526	1,042	1,146	117.9	10.0	677	1,527	1,621	139.4	6.2
Participation Rate (%)	4.2	4.7	5.2			1.8	1.9	2.1			2.4	2.8	3.0		
Hispanic	541	1,333	1,170	116.3	-12.2	318	738	623	95.9	-15.6	223	595	547	145.3	-8.1
Participation Rate (%)	1.9	2.5	2.2			1.1	1.4	1.2			0.8	1.1	1.0		
Asian American[a]	2,160	2,479	2,471	14.4	-0.3	1,633	1,664	1,549	-5.1	-6.9	527	815	922	75.0	13.1
Participation Rate (%)	7.6	4.6	4.6			5.7	3.1	2.9			1.8	1.5	1.7		
American Indian[b]	112	265	347	209.8	30.9	76	130	167	119.7	28.5	36	135	180	400.0	33.3
Participation Rate (%)	0.4	0.5	0.6			0.3	0.2	0.3			0.1	0.2	0.3		

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaska Natives.

Note: Employment counts are based on the following number of higher education institutions each year: 2,868 in 1985; 3,385 in 1993; and 3,480 in 1995. Data for 1985 are based on reported counts and were not imputed for nonreporting institutions, while 1993 and 1995 data were imputed for nonreporting institutions.

Source: U.S. Equal Employment Opportunity Commission, "EEO–6 Higher Education Staff Information" Surveys, 1985 and 1993. U.S. Department of Education, National Center for Education Statistics. *Fall Staff Survey*, 1995.

Table 22

Tenure Rates of Tenure-Track Faculty, by Race/Ethnicity and Gender: 1985, 1993, and 1995

(Percentages with tenure)

	1985			1993			1995		
	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN	TOTAL	MEN	WOMEN
Total	71	75	60	71	76	60	73	78	62
White (non-Hispanic)	72	76	60	73	78	61	74	79	63
Total Minority	63	64	58	62	66	56	62	66	54
African American (non-Hispanic)	62	65	58	61	63	58	59	62	55
Hispanic	67	69	62	63	66	57	62	66	55
Asian American[a]	61	62	56	64	67	52	64	68	52
American Indian[b]	65	66	62	63	72	49	63	70	50

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaska Natives.

Note: Details may not add to totals due to rounding. Employment counts are based on the following number of higher education institutions for each year: 2,868 in 1985; 3,385 in 1993; and 3,480 in 1995. Data for 1993 and 1995 were imputed for nonreporting institutions.

Source: U.S. Equal Employment Opportunity Commission. "EEO–6 Higher Education Staff Information" Surveys, 1985 and 1993. U.S. Department of Education, National Center for Education Statistics. *Fall Staff Survey*, 1995.

Table 23

Full-Time Administrators in Higher Education, by Race/Ethnicity and Gender: 1985, 1993, and 1995

	1985 Total	Percent	1993 Total	Percent	1995 Total	Percent	Percent Change 1985–95	Percent Change 1993–95
TOTAL	120,585	100.0	137,432	100.0	139,914	100.0	16.0	1.8
Men	78,252	65.0	79,829	58.2	78,579	56.0	0.4	-1.6
Women	42,333	35.6	57,603	42.4	61,335	44.0	44.9	6.5
White (non-Hispanic)	107,162	88.9	118,651	86.3	120,242	85.9	12.2	1.3
Men	70,472	90.1	70,303	88.1	69,022	87.8	-2.1	-1.8
Women	36,690	86.7	48,348	83.9	51,220	83.5	39.6	5.9
TOTAL MINORITY	13,423	11.1	18,781	13.7	19,672	14.1	46.6	4.7
Men	7,780	9.9	9,526	11.9	9,557	12.2	22.8	0.3
Women	5,643	13.3	9,255	16.1	10,115	16.5	79.2	9.3
African American (non-Hispanic)	9,124	7.6	12,232	8.9	12,657	9.0	38.7	3.5
Men	5,003	6.4	5,904	7.4	5,835	7.4	16.6	-1.2
Women	4,121	9.7	6,328	11.0	6,822	11.1	65.5	7.8
Hispanic	2,401	2.0	3,580	2.6	3,795	2.7	58.1	6.0
Men	1,553	2.0	1,963	2.5	1,966	2.5	26.6	0.2
Women	848	2.0	1,617	2.8	1,829	3.0	115.7	13.1
Asian American[a]	1,398	1.2	2,243	1.6	2,511	1.8	79.6	11.9
Men	873	1.1	1,244	1.6	1,388	1.8	59.0	11.6
Women	525	1.2	999	1.7	1,123	1.8	113.9	12.4
American Indian[b]	500	0.4	726	0.5	709	0.5	41.8	-2.3
Men	351	0.4	415	0.5	368	0.5	4.8	-11.3
Women	149	0.4	311	0.5	341	0.6	128.9	9.6

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaska Natives.

Note: Details may not add to totals due to rounding. Employment counts are based on the following number of higher education institutions for each year: 2,868 in 1985; 3,385 in 1993; and 3,480 in 1995. Data for 1985 are based on reported counts and are not imputed for nonreporting institutions, while 1993 and 1995 data were imputed.

Source: U.S. Equal Employment Opportunity Commission. "EEO–6 Higher Education Staff Information" Surveys, 1985 and 1993. U.S. Department of Education, National Center for Education Statistics. *Fall Staff Survey*, 1995.

Table 24

College and University Chief Executive Officers, by Institutional Type, Race/Ethnicity, and Gender: 1999

	ALL INSTITUTIONS	FOUR-YEAR INSTITUTIONS	TWO-YEAR INSTITUTIONS
TOTAL CEOs	3,075	1,963	1,112
WHITE CEOs			
Female	512	297	215
Male	1,989	1,323	666
TOTAL	2,501	1,620	881
AFRICAN-AMERICAN CEOs			
Female	49	24	25
Male	136	103	33
TOTAL	185	127	58
HISPANIC CEOs [a]			
Female	33	21	12
Male	84	54	30
TOTAL	117	75	42
ASIAN-AMERICAN CEOs			
Female	5	1	4
Male	15	10	5
TOTAL	20	11	9
AMERICAN INDIAN CEOs			
Female	7	2	5
Male	15	4	11
TOTAL	22	6	16
UNKNOWN ETHNICITY CEOs			
Female	10	2	8
Male	220	122	98
TOTAL	230	124	106

[a] This total includes the CEOs that head 31 Puerto Rican institutions. Consequently, 86 Hispanic CEOs head two- and four-year regionally accredited institutions on the mainland.

Note: Figures include CEOs of regionally accredited, degree-granting institutions in the United States or its outlying areas (e.g., Puerto Rico). The term CEO is defined within the American Council on Education's Corporate Database as the president, chancellor, superintendent, executive director, campus dean, etc., including interim/acting CEOs heading regionally accredited institutions, branches, and affiliates.

Source: American Council on Education Corporate Database. Numbers compiled in November 1999.

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